DEVELOPMENT OF A JOINT OPERATION PLANNING AND EXECUTION SYSTEM ARMY MILITARY OCCUPATIONAL SPECIALTY

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MASTER OF MILITARY ART AND SCIENCE
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by

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14. ABSTRACT
This research project was designed to answer the question of whether there is a need to have a pool of Joint Operation Planning and Execution System (JOPES) operators. The question stems from the researcher's personal experience as a JOPES operator for Army Central Command planning and executing all movements of equipment and personnel into and out of theater. During this assignment the researcher found that there were gaps in where JOPES operators are employed. These gaps became critical when changes to the movement plan were required to meet the mission requirement. Few or no JOPES trained personnel were available, which caused a bottleneck in the deployment process. A content analysis was conducted to answer the question by gathering a large number of professional and doctrinal writings that discussed the use of JOPES in the execution of movements during a deployment. Analysis of this material was conducted by organizing the objective research information into categories of where JOPES' operators are employed, JOPES training requirements, and utilization of Military Occupational Specialty or Additional Skill Identifier as a solution. Research found that there is a need for a pool of JOPES operators and development of an Additional Skill Identifier is the solution.

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

DEVELOPMENT OF A JOINT OPERATION PLANNING AND EXECUTION SYSTEM ARMY MILITARY OCCUPATIONAL SPECIALTY, by Danny L. Robinson, 81 pages.

This research project was designed to answer the question of whether there is a need to have a pool of Joint Operation Planning and Execution System (JOPES) operators. The question stems from the researcher's personal experience as a JOPES operator for Army Central Command planning and executing all movements of equipment and personnel into and out of theater. During this assignment the researcher found that there were gaps in where JOPES operators are employed. These gaps became critical when changes to the movement plan were required to meet the mission requirement. Few or no JOPES trained personnel were available, which caused a bottleneck in the deployment process. A content analysis was conducted to answer the question by gathering a large number of professional and doctrinal writings that discussed the use of JOPES in the execution of movements during a deployment. Analysis of this material was conducted by organizing the objective research information into categories of where JOPES' operators are employed, JOPES training requirements, and utilization of Military Occupational Specialty or Additional Skill Identifier as a solution. Research found that there is a need for a pool of JOPES operators and development of an Additional Skill Identifier is the solution.

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TABLE OF CONTENTS

Page

ACRONYMS

ARCENT	Army Central Command
ASCC	Army Service Component Command
ASI	Additional Skill Identifier
CENTCOM	Central Command
DOTMLPF	Doctrine, Organization, Training, Material, Leadership and Education, Personnel, and Facilities
EUCOM	European Command
FM	Force Module
FMSWeb	Force Management System Web Site
FORSCOM	Forces Command
GCCS-J	Global Command and Control System-Joint
ITO	Installation Transportation Office
IOT	In Order To
JDTC	Joint Deployment Training Center
JFCOM	Joint Forces Command
JOPES	Joint Operation Planning and Execution System
JPEC	Joint Planning and Execution Community
JRSOI	Joint Reception, Staging, Onward Movement, and Integration
JTF	Joint Task Force
MOCS	Military Occupational Classification and Structure
MOS	Military Occupational Specialty
OPLAN	Operation Plan
OPORD	Operation Order

PACOM	Pacific Command
SBCT	Stryker Brigade Combat Team
SCC	Service Component Command
SECDEF	Secretary of Defense
SIPRNET	Secret Internet Protocol Router Network
STRATAIR	Strategic Airlift
TACC	Tanker Airlift Control Center
TC-AIMS II	Transportation Coordinators' Automated Information for Movements System II
TPFDD	Time Phased Force Deployment Data
TPFDL	Time Phased Force Deployment List
TRANSCOM	Transportation Command
TUCHA	Type Unit Characteristics
UMO	Unit Movement Officer
USAEUR	United States Army Europe

ILLUSTRATIONS

Page

CHAPTER 1

INTRODUCTION

Background

The Army has invested time and money in fielding systems and expanding the knowledge base of leaders at all levels pertaining to strategic movements. Along these lines, the Army has established the Transportation Coordinators' Automated Information for Movements System II (TC-AIMS II) at the company level. This system allows units to load all of their equipment into a planned deployment process then enter that data into Joint Operation Planning and Execution System (JOPES) where the movement plan is linked to strategic lift. This information is then used to plan intratheater lift to a final location in the area of operation. Currently, data is entered into JOPES at the Installation Transportation Office (ITO), Army Command, Service Component Command (SCC), or Combatant Commander levels. Below the ITO level, however, the level of understanding of JOPES is very limited, which handicaps deploying units that must make changes to a movement plan during its execution. This handicap comes in the form of system knowledge and access. Ultimately, this lack of system knowledge and access has caused units to hold up the Joint Reception, Staging, Onward Movement, and Integration (JRSOI) process in theater.

While assigned to Army Central Command (ARCENT) as a G4 Mobility JOPES operator the author was responsible for communicating between Central Command (CENTCOM), Forces Command (FORSCOM), Joint Forces Command (JFCOM), Pacific Command (PACOM), European Command (EUCOM), and other organizations to plan and execute deployment / redeployment of forces to the CENTCOM area of

responsibility. After operating JOPES for a few weeks, it became evident that nothing moved until it was in JOPES. The air- and sealift requirement in JOPES are supposed to cover all movement from Fort to Port, Port to Port, and Port to Foxhole.

Various issues developed with this process during current deployment operations. First, multiple changes to final destination took place due to supported commander requirements changing. As British forces planned to leave Iraq in the spring and summer of 2009 and turn over Al Basrah to United States forces, deploying units were plugged into the operations plan inside of their deployment window. Some units were notified as they finished their block leave of the mission change, leaving little to no time to make any changes to their deployment data in JOPES.

Second, due to the operational situation changing, a commander may have to change the destination of deploying units that have already initiated strategic movement between home station and theater. As forces were removed from Iraq, for example, during the post-surge timeframe, command in Iraq had to scramble to reallocate the newly deploying units to ensure coverage with a smaller force allocation. This caused some of the deploying divisions to be split out by brigade into different divisional areas and these splits were not what had initially been loaded into JOPES. These last minute changes were planned after the unit's equipment and some personnel had already started the strategic movement process. Since the plan in JOPES takes the equipment and personnel from home station all the way to the deployed location, these last minute changes directly affected underutilization of aircraft and other intratheater assets.

Third, deploying to a land-locked region like Afghanistan requires deployment plans resembling Fort to Port, Port to Hub, and Hub to Foxhole for troops and equipment.

JOPES is not programmed to meet these multiple ports and hubs that may be required for deployment. To overcome these issues, ARCENT and other JOPES operators conducted strategic movements in an intertheater Time Phased Force Deployment Data (TPFDD) Force Module (FM) and then utilized an intratheater TPFDD FM that fed the in-theater delivery of equipment and personnel. By utilizing an intratheater TPFDD FM units were able to make last minute destination changes to JOPES ensuring the correct destination and maximized utilization of intratheater assets.

The discussion of asset utilization deserves mention in this research paper because even though current operations use contingency funding to overcome any shortfalls, it is expensive to move a deploying force. Mixed up deployment plans waste large amounts of money. Intratheater delivery of troops for deploying units is planned within 96 hours and this movement plan is built directly off the initial JOPES deployment plan that is in the TPFDD. Changes to the destination require immediate changes to JOPES records so that the right data is provided for the air mobility planners in theater for the proper allocation of lift assets and maximized utilization of those assets also ensuring the timely delivery of the units to the proper locations. The last minute change in destination of a deploying unit caused some unit commanders to refuse to get on an aircraft in Kuwait, because it was destined to the initial location that was entered in JOPES and had not been changed to the newly planned location. Since aircraft in theater are in high demand and in a mission day the aircraft have multiple movement requirements if a commander refused to board an aircraft the aircraft would depart empty.

This process required an increase in JOPES personnel and deploying unit personnel that understood the process. For brigade and above units, the Mobility Warrant

Officers, movement Non-Commissioned Officers, and Division Transportation Officers usually understood the process with limited understanding of JOPES capability. Due to limited knowledge and little to no access to JOPES, these personnel were incapable of making changes that met the commander's intent. Additionally, smaller support units (battalion and below) had no understanding of JOPES and usually would be delayed in Kuwait or other locations due to changes that required JOPES corrections. As a JOPES operator, I had the opportunity to work with other services. One service that had limited issues with changes or small unit deployments was the Marine Corps. Initial review of their processes identified no differences from the Army in how data is entered into JOPES for deployments. The Marine Corps JOPES operators are trained by personnel from the Joint Deployment Training Center (JDTC), the same personnel that are responsible for training all personnel that access JOPES no matter what service the operator originally belongs. Further review revealed that the Marine Corps has to abide by the same procedures and guidelines as all other service operators.

The one identified difference between the Army and Marine Corps was the employment of their personnel. The Marine Corps has an occupational specialty for JOPES operators and these personnel are employed at the levels of battalion and above. Also, the Marine Corps has JOPES operators as a primary military specialty which is equivalent to an Army Military Occupational Specialty (MOS). Finally, the Marines habitually use JOPES for all movements, whether to a training area or to a theater of operations. In laymen's terms, JOPES provides the Department of Defense with a planning system that takes strategic guidance, current environment analysis, and unit

status to develop operational plans that can be executed in specific Geographic Combatant Commands Areas of Responsibility.

This research project will review the current deployment process through the utilization of JOPES; determine the training JOPES operators receive, and then determine how best to get a pool of available JOPES operators into units below the ITO and above the battalion. For this research project, the execution of an operations order in terms of how JOPES executes a TPFDD process will be examined. Key points identified in after action reviews will be analyzed from Operations Support Hope, Restore Hope, Desert Shield, Desert Storm, and Vigilant Warrior. Specific examination of these after action points will provide an understanding of how JOPES is used in executing deployments and will lead to an understanding of the role the JOPES operator plays. Past and current operations have identified the importance of linking the JOPES data with the strategic lift to ensure Combatant Commanders receive the right forces at the right time for decisive victory.

The Army has JOPES operators at the ITO, Army Command, SCC, or Combatant Commander levels, but this has caused a handicap for deploying units when their deployment locations have changed during the execution of a deployment. These changes have caused units to deploy to Northern Iraq when they were needed in Southern Iraq and took days to correct the improper deployment due to limited availability of intratheater airlift assets. The lack of units having knowledgeable and trained personnel that can access JOPES and make changes while the plan is being executed has hindered units' ability to meet the commander's intent. This proposed lack of trained personnel requires that this research project consider how JOPES operators are trained.

Initial review of this shortfall has identified a difference between the process used by the Army and the Marine Corps. The Marine Corps has a JOPES MOS with trained personnel assigned to all battalion and above organizations. Having these operators at these levels have provided the Marine Corps with knowledgeable operators who develop successful operational plans and allow flexibility in making the changes needed for a changing battlefield. When compared to deploying Army units, the only identifiable difference is having the JOPES MOS and the level at which these trained personnel are employed. This leads to the premise that if the Army had a pool of JOPES operators, either an MOS or trained personnel with an Additional Skill Identifier (ASI) the strategic movement process would be more efficient.

Primary Research Question

To limit future movement issues during deployments, should a JOPES MOS or ASI be developed that is employed below the ITO level in a unit?

Secondary Research Questions

In order to answer the primary question the author will need to answer the following secondary questions:

1. Where does the Army currently employ JOPES and JOPES personnel?
2. What classifies a Soldier as a qualified or trained JOPES operator?
3. Is a new MOS needed to fill the gap?
4. Can an ASI added to a current MOS fill the requirement for a deployed unit?

Assumptions

JOPES is the single system that has been identified by the Department of Defense to conduct planning and execution of deployment operations. For purposes of this research project the first assumption is that JOPES will remain the primary system for all services to plan and execute their deployment operations. The second assumption is that there will be an elevated amount of force deployments to various Geographic Combatant Commands for the unforeseeable future. This recurrent flow of force deployments will maintain a continuous need to utilize JOPES in the future. A third assumption for this research project is that having dedicated JOPES operators has allowed the Marines to operate with limited issues. This project will be cognizant of these three assumptions and accept them as true laying an initial foundation for the following research to build upon.

Definitions

The following definitions are all from the Department of Defense Dictionary of Military and Associated Terms (Joint Publication 1-02) except for the term Newsgroups and Installation Transportation Officer. The definition for the word Newsgroups was found in the Joint Operation Planning and Execution System (JOPES) Personnel Course Student Training Guide developed by United States Joint Forces Command Joint Deployment Training Center (USJFCOM J7-JDTC). FM 4-01.30 provided the definition for Installation Transportation Officer.

Deployment Planning: Operational planning directed toward the movement of forces and sustainment resources from their original locations to a specific operational area for conducting the joint operations contemplated in a given plan. Encompasses all activities from origin or home station through destination, specifically including intra-

continental United States, intertheater, and intratheater movement legs, staging areas, and holding areas.

Execution Planning: The phase of the JOPES crisis action planning process that provides for the translation of an approved course of action into an executable plan of action through the preparation of a complete Operation Plan (OPLAN) or Operation Order (OPORD). Execution planning is detailed planning for the commitment of specified forces and resources. During crisis action planning an approved OPLAN or other President and Secretary of Defense approved course of action is adjusted, refined, and translated into an OPORD. Execution planning can proceed on the basis of prior deliberate planning, or it can take place in the absence of prior planning.

Force Module(s) (FM): A grouping of combat, combat support, and combat service support forces, with their accompanying supplies and the required non-unit resupply and personnel necessary to sustain forces for a minimum of 30 days. The elements of force modules are linked together or are uniquely identified so that they may be extracted from or adjusted as an entity in the JOPES databases to enhance flexibility and usefulness of the operation plan during a crisis.

Installation Transportation Officer (ITO): Person(s) designated or appointed to perform traffic management functions at the CONUS installation level.

Intertheater: Between theaters or between the continental United States and theaters.

Intratheater: Within a theater.

Joint Operation Planning and Execution System (JOPES): A system that provides the foundation for conventional command and control by national- and combatant

command-level commanders and their staffs. It is designed to satisfy their information needs in the conduct of joint planning and operations. JOPES includes joint operation planning policies, procedures, and reporting structures supported by communications and automated data processing systems. The system is used to monitor, plan, and execute mobilization, deployment, employment, sustainment, and redeployment activities associated with joint operations.

Joint Planning and Execution Community (JPEC): Those headquarters, commands, and agencies involved in the training, preparation, movement, reception, employment, support, and sustainment of military forces assigned or committed to a theater of operations or objective area. JPEC usually consists of the Joint Staff, Services, Service major commands (including the Service wholesale logistics command), unified (and their Service component commands), subunified commands, transportation component commands, JTFs (as applicable), Defense Logistics Agency, and other Defense agencies as may be appropriate to a given scenario.

Newsgroups: Newsgroups are Secret Internet Protocol Router Network (SIPRNET) bulletin boards that provide the capability to create/post/read/transfer unformatted text files to/from topic bulletin boards that are established and maintained by network users. Newsgroups are a primary means of information exchange in JOPES and a Newsgroup is established by the supported command and linked to the command's SIPRNET Homepage for every plan, operation, or exercise.

Supported Commander: The commander having primary responsibility for all aspects of a task assigned by the Joint Strategic Capabilities Plan or other joint operation planning authority. In the context of joint operation planning, this term refers to the

commander who prepares operation plans or operation order in response to requirements of the Chairman Joint Chiefs of Staff.

Supporting Commander: A commander who provides augmentation forces or other support to a supported commander or who develops a supporting plan. Includes the designated combatant commands and Defense agencies as appropriate.

Theater of Operations: A subarea within a theater of war defined by the geographic combatant commander required to conduct or support specific combat operations. Different theaters of operations within the same theater of war will normally be geographically separated and focused on different enemy forces. Theaters of operations are usually of significant size, allowing for operations over extended periods of time.

Time-Phased Force and Deployment Data (TPFDD): The JOPES database portion of an operation plan; it contains time-phased force data, non-unit-related cargo and personnel data, and movement data for the operation plan.

Limitations

Based on the researcher's experience and most recent duties in the CENTCOM theater, it was determined that a specific disconnect was identified between how the services conducted movement operations in regards to JOPES. The availability to personnel that are knowledgeable of the JOPES deployment process could be a limitation in gathering research material. Classification of data will further limit what will be covered in this research project. The data covered in this project will reference older case studies, thesis, and monographs, because there seems to be a limited amount of recent deployment material that reference JOPES issues.

Delimitations

This research will look for possible solutions to any identified movement issues. The research will cover the requirements for developing and initiating a new MOS in the Army. It is expected that this portion of the research will provide possible solutions at the end of the thesis, but it is expected that this will be an integral topic that should be studied.

Significance

This research project will identify a capability gap that impedes the execution of JOPES in the movement of deploying Army forces. Through research, the capability gap will be clarified by analyzing official military doctrine and manuscripts. Based on the analysis recommendations will be made for the Army to incorporate into current deploying units that will overcome the identified capability gap. Implementation of the recommendations will ensure current and future deploying units will have the capability to directly manage deployment movement issues in JOPES instead of relying on outside organizations. Developing a pool of JOPES qualified operators and placing these personnel in JOPES positions will provide commanders with the first hand capability of planning, executing, and managing deploying forces in JOPES.

Conclusion

The theory behind this proposed research project is that a JOPES operator capability gap exists and was identified by the researcher during his previous assignment. The JOPES execution process is so crucial in ensuring that a unit's personnel and equipment is properly input in the system for deployment from home station to an area of

operations. Any changes during execution require JOPES operators to immediately access the system and correct the plan to ensure the force deploys according to the commander's needs. This chapter has outlined the primary research question and the secondary research questions needed to verify the initial theory. The assumptions, limitations, and delimitations have been identified leading the research project in a direction that will not fall prey to any artificial conclusions. Through the identified direction outlined in this chapter, the next chapter will review all literature currently available reference the theme of this research project.

CHAPTER 2

LITERATURE REVIEW

Introduction

The purpose of this research project is to identify the gap that hinders the execution of movements in JOPES and clarify the effects of this gap on deploying Army units. Through analysis, recommendations will be made to overcome the absence of JOPES operators capable of planning, executing, and managing deployments for a modular Army deploying force. The information that has been collected for analysis is listed in this chapter. The information will be subcategorized by publication, so for this research project the publications are Joint Policy, Army Policy, Professional Military Manuscripts, and Professional Articles. These subcategories will provide stovepipes for collection of data by official source. This data was collected from multiple sources with the intent of identifying where JOPES operators are employed, defining JOPES operator training, previous post deployment analysis reference JOPES utilization, how to develop a new MOS, and how to develop a new ASI.

Joint Policy

According to USJFCOM's JOPES Support Personnel Course handbook the Global Command and Control System–Joint (GCCS-J) helps "joint force commanders synchronize the actions of air, land, sea, space, and special operations forces" (USJFCOM J7-JDTC 2007, 4). This joint system includes Intelligence, Situational Awareness, Combat Support Command and Control, Force Readiness, and JOPES applications. "JOPES is the primary joint contingency and crisis action planning tool"

(USJFCOM J7-JDTC 2007, 5) that commanders use to plan and execute deployments. Through the proper utilization of JOPES use of strategic movement assets can be effeciently managed. These plans are developed and maintained at and above the Combatant Commander level. Once a plan is activiated the unit specific movement data is entered and managed by JOPES operators in the installation transportation office. This process is important to understand before reviewing the literature that references a gap in updating the movement information in JOPES during the execution of a plan. It must be understood that any change from the initial plan requires that JOPES operators get into the plan and make the changes.

According to the JDTC's Organizational Overview Fact Sheet the JOPES Training Organization was established in 1989 and "was designated as the single functional training manager for JOPES and other planning and execution related applications" (USJFCOM J7-JDTC 2009, 1). The JDTC is the executive agent that "develops and delivers functional training and education on Global Command and Control System-Joint (GCCS-J) and Global Force Management applications" (USJFCOM J7-JDTC 2009, 1). JDTC personnel have developed multiple education and training programs for personnel to use for "deployment, situational awareness, and force management" (USJFCOM J7-JDTC 2009, 1). This organization provides the single portal for all services to get qualified personnel to access and operate JOPES. The three primary training courses the JDTC provides that are relevant for this research project are the JOPES Support Personnel Course, JOPES Action Officer Training Course, and the JOPES Executive Presentation. The Support Personnel Course provides a personnel with the what and how of JOPES process for operators. The Action Officer Training Course

provides personnel with the information needed for leaders to operate in Operational Planning Groups. The Executive Presentation provides a brief overview of capabilities of JOPES for senior leaders.

Army Policy

The collection of research data reference the current positions that the Army employs JOPES operators requires accessing Force Management System Web Site (FMSWeb). “FMSWeb is the official repository for Army decisions on mission, organizational structure, personnel and equipment requirements and authorizations for Army units and Army elements of joint organizations for the current year through the first program year” (Headquarters, Department of the Army 2006). This repository is the only means of identifying what positions are officially established according to the Department of the Army. Units may establish themselves in various manners, but according to the Army if the position is not listed on FMSWeb as being located within that specific unit then formally the position is not authorized. If the position is not authorized then no personnel will be provided for the unit to fill the position and authorization for training or equipment will not be provided to the unit. This website is important in terms of researching where JOPES operators are currently employed. It also provides information on authorized grade, MOS, and any specific requirements such as ASI needed to fill authorized positions on an MTOE.

The initial draft of FM 3-93 titled “Theater Army Operations” is currently going through review and provides the updated doctrine that regulates ASCC internal organization and operations. Specific to this research is information reference the location of JOPES operators in the newly designed modular headquarters and the tasks expected

to be conducted. Under the new modular design, the ASCC is the highest headquarters expected to work in a theater of operations and was initially designed to provide the basic staff structure for a Joint Task Force or Joint Force Land Component Command. In FM 3-93 this requirement was changed based on "Army Campaign Plan (ACP) Decision Point 129 (DP 129), Global Command and Control (C2) Laydown, and DP 123, Division, Corps, and Theater Army Design Refinement". Through these directives, the modular Corps headquarters have been designated "to C2 major operations instead of theater armies" (Headquarters, Department of the Army 2010a, vi). "Theater army retains responsibility for AOR-wide contingency planning and coordination . . . service support plans to the GCC's Theater Campaign Plan" (Headquarters, Department of the Army 2010a, vi). To conduct the planning a JOPES element has been placed under the movement and maneuver plans cell and JOPES operators have also been placed in the G4 mobility operations section. In the JOPES element operators "serves as the theater army proponent for JOPES, and analyzes TPFDDs and request for forces (RFF) against airlift and sealift allocations" (Headquarters, Department of the Army 2010a, 10-7). The JOPES operators in the mobility section "provides staff oversight of the effective distribution and efficient retrograde (supply chain visibility) and redeployment of equipment, personnel, supplies and services (intra and inter theater distribution)" (Headquarters, Department of the Army 2010a, 13-13). This document provides the most recent information on each section's mission and organization which will be analyzed during this research project.

DA Pamphlet 611-21 is an online publication produced and maintained by the Department of the Army. This online pamphlet provides "guidance to individuals, commanders, personnel managers, proponents, and combat and material developers"

(Headquarters, Department of the Army 2010b) for the management of "classification of individuals by . . . (duty position title, identifier(s) and grade in requirements and authorization documents)" (Headquarters, Department of the Army 2010b). Department of the DA Pamphlet 611-21 has been placed online to provide the Army instantaneous access to the latest approved changes to MOS information. The Army personnel management community refers to this online document as the MOS Smartbook. Information collected from the MOS Smartbook provided a comparison of all authorized MOS by grade for determination of ASI compatibility.

In Field Manual-Interim 3-0.1 titled *The Modular Force*, the structure of a plans cell is located under the G-5 in the Division Main Command Post and comprises various specialities, but one that is specifically listed is "a Joint Operation Planning and Execution System (JOPES) officer" (Headquarters 2008, 5-10) shown in figure 1. This is the lowest level that any information is listed in doctrine for any type of JOPES operator or connectivity. There is also no required MOS listed to fill these sections.

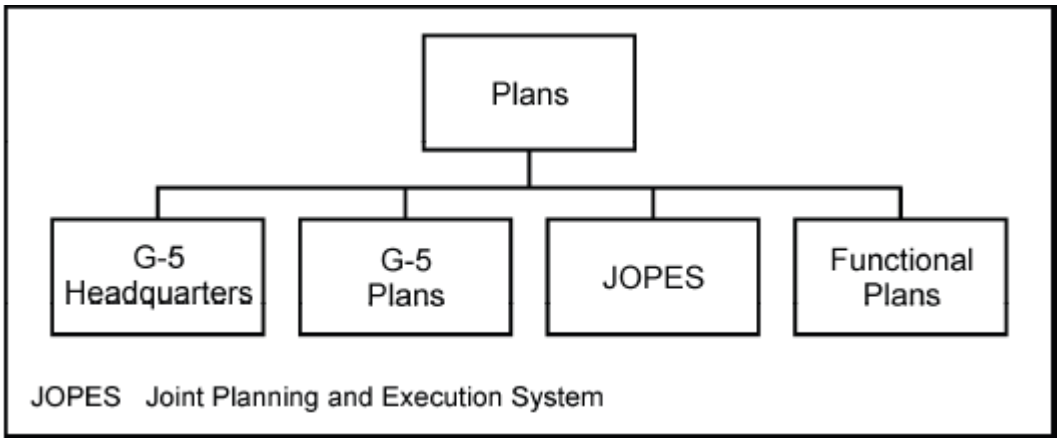

Figure 1. Main Command Post Plans Cell
Source: Headquarters, Department of the Army, Field Manual-Interim (FMI) 3-0.1, *The Modular Force* (Washington, DC: Department of the Army, 2008), 5-10.

A final answer needed for this research project is if an MOS could be created to fill the gap in developing and maintaining a pool of JOPES operators. According to Department of the Army Regulation 611-1 "Changes to the MOCS may be necessary to reflect technological development, changes in doctrine, force structure, functions, missions, or to correct performance deficiencies" (Headquarters, Department of the Army 2007, 3). To initiate a change for a new MOS the necessity of the change must be great enough that a whole career field can be developed that will ensure longevity of the field. This longevity would have to incorporate the "grade structure, recruiting and training requirements, positions documentation, personnel reclassification and distribution of personnel" (Headquarters, Department of the Army 2007, 3).

Army Regulation 611-1 also regulates the development and management of ASIs. An ASI should be utilized to identify specialized skills that the Soldier acquired through formal school training or civilian certification. These specialized skills should "include operation and maintenance of specific weapon systems and subsystems, computer programming languages, procedures, analytical methods . . . that are too restrictive in scope to comprise a MOS" (Headquarters, Department of the Army 2007, 20). Final point that must be reviewed in developing an ASI is that by regulation the skill must be specialized, acquired through formal training, and not skill "acquired through on-the-job training (OJT) or on-the-experience (OJE)" (Headquarters, Department of the Army 2007, 20).

Professional Military Manuscripts

"Strategic Airlift Inefficiencies from Desert Shield to Vigilant Warrior" by MAJ Philip A. Bossert, US Army Command and General Staff College, Master of Military Art

and Science Thesis, 2 June 1995, provided an excellent link between the JOPES usage and economical management of strategic movement assets. Bossert's thesis reviews various historical operations that utilized JOPES to plan and execute the movement of deploying forces. In his thesis he tries to see if the military learned from previous deployments, through the use of JOPES, to maximize efficient utilization of the "limited size of the strategic airlift fleet" (Bossert 1995, iii). Bossert references various lessons learned from previous operations, such as Operation Restore Hope, which identified "the importance of maximizing both the use and reliability of critical strategic lift assets." (Bossert 1995, 19) A recurring issue that Bossert identified in his anaylsis of Operations Desert Shield, Restore Hope, Support Hope, Uphold Democracy, and Vigilant Warrior was that the Army had issues with inputting JOPES movement data. In the case of Operation Restore Hope, the lessons learned "admonishes Army units for not having personnel trained to update the Time-Phased Force and Deployment List (TPFDL) into JOPES" (Bossert 1995. 19). Additionally, the importance of trained JOPES operators is amplified when "one change poorly managed can ripple throughout the entire system causing multiple problems" (Bossert 1995, 26). In Operation Vigilant Warrior a JOPES validation issue and "invalid TPFDL inputs caused six commercial airlift missions valued at $1.5 million to be cancelled" (Bossert 1995, 81). Bossert identified additional issues with the failure of having a pool of JOPES trained operators during Operation Vigilant Warrior when "there were not enough JOPE-trained operators available at the deploying units, and it took thirty days to get a JOPES team into the Gulf" (Bossert 1995, 80).

JOPES does not only affect deploying equipment and personnel, but in theater it directly affects the intratheater movement of supply. In "Lessons Learned Concerning

MC&G Area, Product, and Distribution Requirements in Operation Desert Shield/Desert Storm" by Teresa J. Boyd, Naval War College Thesis, 13 February 1992, highlights JOPES effects on intratheater distribution of maps. In this thesis Boyd identified a daily issue that the Defense Mapping Agency faced when trying to distribute high demand maps and products to the forces in theater. She identified that even after the Combatant Commander increased the priority of these products "Lift allocations were not known because the allocations had not properly been planned and entered into JOPES" (Boyd 1992, 10). The thesis further stated that to overcome the lift allocation issues dedicated airlift was provided, but this continued to be an issue throughout the operation. Boyd does advise that "Airlift allocations should have been identified and properly loaded into JOPES" (Boyd 1992, 14) and that priorities should be identified for the TPFDD.

LTC Stanley B. Clemons conducted a study into what unit level JOPES activities should be executed in "Customer Discipline Paramount for Ensuring Efficient Airlift Operations," Air War College Thesis, 1 April 1998. Clemons provided a good outline for the steps taken for entering data into the TPFDD as listed below:

> Step 5. Shortfall Identification-Occurs throughout the plan development phase and the focus is on identifying and resolving shortfalls. A transportation deployment simulation is conducted on the working TPFDD. Customers must resolve identified shortfalls, if possible. Adjustments must be restricted to those shortfalls that will not impact the CINC's CONOPS.
>
> Step 6-8. Transportation Feasibility Analysis, TPFDD refinement, and Documentation are steps that are generally exclusive to the supported commander and component commanders. Shortfall resolution is normally directive to the customer. These steps ensure that the transportation plan is feasible and adjusts the plan, as necessary, based on identified and resolved shortfalls. (Clemons 1998, 12-14)

These steps provide the reader with a layman's understanding of the JOPES entry process for a unit that is conducting planning, but Clemons' thesis does not discuss where

changes to the plan would be made if the execution has already been initiated. Should a change to the plan occur while a unit is moving, a JOPES operator would need to make the revision in JOPES. Clemons' thesis lends credence to and tries to identify at what level JOPES operators should have access to JOPES. Clemons also mentions the validation process that is used once the JOPES steps are completed and a plan is authorized by the President to be executed. The Service Components verify the movement requirements and the Combatant Commanders validate the movement plan, which he stresses is a requirement that cannot be delegated down to unit levels due to the ramifications of TPFDD violations. Clemons does recommend that "updating of JOPES-related data bases can and should be pushed down to the true customer level where the expertise in what "must move" resides, leaving management and oversight to the Service Component" (Clemons 1998, 30).

"The VII Corps Deployment to Saudi Arabia: An Analysis of Deployment Transportation Planning and Management." by MAJ Harry S. Hamilton, US Army Command and General Staff College, Master of Military Art and Science Thesis, 4 June 1993, makes some important observations from the deployment of VII Corps. One of the most relevant observations is that "Joint Operations, Planning and Execution System (JOPES) must be improved. All units in the military whether forward deployed or not, should establish generic deployment contingency plans" (Hamilton 1993, 93). Hamilton has further points that can be used for this research project, but they fall under the MOS versus ASI development subcategory.

On 14 November 2002, Dr. Daniel L. Haulman wrote "Intertheater Airlift Challenges of Operation Enduring Freedom" for a Maxwell Air Force Base Historical

Research Report that compared lessons learned from Operations Desert Shield and Desert Storm to the execution of airlift operations for Operation Enduring Freedom. This report provides an excellent review of lessons learned and how the military incorporated these lessons learned into the more recent airlift operations through analysis of three categories. First, Haulman reviewed the lessons learned and changes incorporated in time for Operation Enduring Freedom. Next, Haulman's report further identifies issues that presented themselves during Operation Enduring Freedom that were not present during Operations Desert Shield and Desert Storm. Finally, the report identified issues that were common to Operations Desert Shield, Desert Storm, and Enduring Freedom.

This final category of the report provides the most credence to the current research report in terms of identifying common issues that remain today and should be corrected for future deployments. A few of the key points from this category are "failures in automated planning systems, insufficient in-transit visibility, initial shortages of theater bases, overloaded staging bases, low mission-capability rates for older transports, and unnecessary airlift of cargo that could have gone by alternative means" (Haulman 2002, 1). The research continued to say that for all three operations "automated planning systems failed to match airflow supply with demand" and that the TPFDD and JOPES "were not very useful, partly because initial operational plans were not detailed or practical enough" (Haulman 2002, 5). His research also found that "personnel failed to input data as quickly or as accurately as needed to match airflow" (Haulman 2002, 5). Haulman concludes in his research that "better training of personnel to use those systems should help provide greater use of the Joint Operations Planning and Exectuions System (JOPES)" (Haulman 2002, 9).

Additional data could be found for JOPES utilization in the monograph "Contingency Operation Logistics: USTRANSCOM's Role When Less Must Be More" by MAJ Brian R. Layer, School of Advanced Military Studies, United States Army Command and General Staff College dated 6 May 1994. Layer's monograph reviews the importance of logistics in contingency operations from the perspective of USTRANSCOM's role as the distribution process owner. Though this monograph does not focus on any deployment information, it does state the importance of tracking and moving supplies into a theater. Layer states that "USTRANSCOM is the owner of the Joint Operation Planning and Execution System (JOPES), they have visibility over all plans," which is true in terms of the logistics movements and strategic movements. An issue with this monograph is that it is dated and does not identify any issues that are present with the execution of deployment movements in JOPES. USTRANSCOM still relies on the Combatant Commands and subordinate commands to enter most of the JOPES data.

The most beneficial document used that breaks down the difference between whether a JOPES operator should be trained or educated is found in MAJ Ron L. Sperling's Department of the Air Force's Air University research project "The Future Role of the Joint Deployment Training Center in the Education and Training of the 'Joint Deployment Process'" dated 13 June 2003. Sperling's project "explored the Joint Deployment Process as it is taught" and added additional findings as to the defined difference between being trained and educated. Some of his key points were that lack of hands-on training actually makes the training more of an education. The difference between the two definitions was developed through research of how a typist learns to

type. “In an article by John Moore, the distinction is made. ‘Training means a narrowly focused program that leads to high proficiency in a specific skill . . .’” (Sperling 2003, 12-13). On the other hand “education focuses on teaching the what, who, where, and why” (Sperling 2003, 13), but the how is the training which can only be gained through hands on. Sperling continues with his findings by stating that”service schools taught doctrine to an adequate level, yet provided insufficient skills training to apply the knowledge” (Sperling 2003, 30). These definitions were based on Sperling’s analysis of research conducted by two independent professors that study and teach learning models. Sperling’s working definitions of training and education can be used for this research project.

Hamilton provided a possible location where the JOPES operator could be located after reviewing his research. His thesis is a review of VII Corps’ deployment to Operation Desert Shield and Operation Desert Storm from Europe. This document outlines the plausibility of using the movements section at the division level to coordinate with higher organizations for intratheater movements. “If the division does not have the resources, or the requirement is to go out of the division area, the division transportation officer becomes involved. He coordinates for resources from the next higher movements control activity” (Hamilton 1993, 23). He continues with his main point that “transportation management function provides the ability to bring overwhelming combat power to the battlefield” (Hamilton 1993, 26). Hamilton places a lot of emphasis on the process, procedures, and organizations that should support the movement of units for deployments. His goal is to provide a “case study from which to draw lessons to improve deployments in the future” (Hamilton 1993, 94).

A document titled “Development of Modular Force Designs in Perspective” was provided in an e-mail from Fred Svedarsky of the Combined Arms Doctrine Directorate. This document provided a detailed historical background into the Army’s development of a modular force focusing on Theater Army, Corps, and Division headquarters. It is anticipated that the document will be published in Center for Army Lessons Learned Newsletter 10-48 under the title “Army Transformation: Division, Corps, Theater Army,” in July 2010. The background covered in the emailed document centered on the Army’s need “to create a modular “brigade-based” Army that was more responsive to the Geographic Combatant Commander’s (GCC) needs . . .designed to better employ Joint capabilities” (Svedarsky 2010, 7). Annotated in this document is the guidance given to the Army for developing the modular headquarters which can be analyzed along with information from FM 3-93 to see if there is a gap in employment of JOPES operators.

Professional Articles

During the collection phase of this research project, a professional article was found in Division Transportation Officer and Mobility Officer Newsletter (vol. 6, no. 1). This newsletter is published by the Deployment Process Modernization Office, which is an Army G3/4 chartered organization. In the January-March 2010 issue, an article titled “Brigade Mobility Officer After Action Review Report for the 5th Stryker Brigade Combat Team (SBCT) Deployment in Support of OEF” by the unit’s Mobility Warrant Officer CW2 Raynold J. Desnoyers. Desnoyers article was drawn from comments submitted in the unit’s deployment after action review. “In early March 2009, during the brigade CERTEX at NTC, 5/2 ID (SBCT) was redirected by the SECDEF from Iraq to Afghanistan with a latest arrival date (LAD) of 30 July 2009” (Desnoyers 2010, 3). This

change caused a complete revamp to the deployment movements of the unit and the predeployment preparations. Of the thirteen issues identified, two dealt with JOPES execution issues. The first issue reference JOPES centered on the building of the units deployment list and getting it loaded from TC-AIMS II, “at one point the UMOs had to go to I Corps, IOT rebuild the Unit Deployment List in JOPES during the execution phase, with only one individual operating JOPES” (Desnoyers 2010, 5). Desnoyers’ recommendation “Mobility Warrant Officer at the brigade level should be authorized to have a JOPES account with read and write privileges, IOT facilitate the brigade requirement during deployment planning phase” (Desnoyers 2010, 6). His recommendation holds merit when it is further understood that “I Corps must support multiple brigades at one time, which greatly slows down the process without brigade personnel having access into the JOPES system” (Desnoyers 2010, 6). The second mention of JOPES in the after action review is reference strategic air operations. In the article it references information provided by the I Corps G4 was that the JOPES data was “inaccurate and the Tanker Airlift Control Center (TACC) could not clearly identify the equipment” (Desnoyers 2010, 13). This caused issues with in the strategic lift community in trying to plan strategic movements of the unit’s equipment. Due to this JOPES entry issue “they suspended the STRATAIR operation until the JOPES records were corrected” (Desnoyers 2010, 13). Desnoyers’ recommendations to prevent these issues in the future were primarily focused internal to the unit in terms of loading data, managing the data loading, and supervising the port loading process. JOPES proved to have an effect on Desnoyers’ unit, so much so, that it has been published for all Army movements personnel currently preparing for deployments.

Conclusion

This chapter discussed all of the doctrinal material and previous research that references employment of JOPES operators, JOPES operator training requirements, the JOPES deployment process, MOS development, MOS descriptions, and ASI development. The information was reviewed by publication type starting with Joint Policy, Army Policy, Professional Military Manuscripts, and finally a Professional Article. The policy information collected is straight forward in the deployment process, the training requirements, and the MOS or ASI development process. There are multiple Professional Military Manuscripts that provide adequate post deployment analysis in terms of the importance of JOPES and having trained JOPES operators. The Professional article provides a firsthand post deployment analysis from a unit level signaling a need for trained JOPES operators below the ITO level. In chapters 3 and 4, this literature will be categorized, vetted for relevance according to an established criterion, and then analyzed to answer the secondary research questions.

CHAPTER 3

RESEARCH DESIGN

Introduction

This chapter is used to review the methodology used to conduct the research in terms of the primary and secondary questions, the research steps used to collect research information, and the research criteria used to analyze the information collected. This qualitative research was conducted through content analysis of Joint Publications, Army Regulations, and professional manuscripts. Content analysis was chosen as the primary method due to time limitations, availability of unclassified JOPES information, and limited number of after action documents that outline the use of JOPES in the execution of moving deploying forces. The content collected and researched has been used to clearly answer the secondary research questions, which provided an answer to the primary research question.

Research Questions

The limitations of time, classification, and content focused professional manuscripts required that research was conducted through content analysis. This method is an adequate way to acquire large amounts of information from various authors in various formats. This large amount of information does pose a problem when the researcher is already in a time crunch, but after reading “How to read” by Paul Edwards the researcher found methods to quickly identify the key material needed.

The development of the following secondary research questions allowed for a stovepipe method of finding, categorizing, and analyzing material needed for the research project:

1. Where does the Army currently employ JOPES and JOPES personnel?

2. What classifies a Soldier as a qualified or trained JOPES operator?

3. Is a new MOS needed to fill the gap?

4. Can an ASI added to a current MOS fill the requirement for a deployed unit?

Research data found and analyzed for the first question was from FMSWeb and multiple professional military manuscripts. The data used to research the second question has been gathered from JDTC training doctrine, Joint Publications, and professional military manuscripts. The research data used to answer the third and fourth questions have been drawn directly from Army Regulations.

FMSWeb provided a copious amount of Army unit positions and took the most time to extract relevant information that pertained to the specific research on positions that currently employ JOPES operators. Since there is currently no MOS or ASI for JOPES operators the only way to identify where JOPES operators are employed was through keyword searches of the online repository. These word searches of the MTOE personnel reports provided a means to search all commands, positions, military grades, and locations that are authorized to have dedicated personnel operating JOPES. Since a possible solution would be the utilization of a current ASI, an additional keyword search was conducted for 3H the Joint Planner ASI. This ASI was chosen since it requires personnel to complete education on JOPES and utilization of JOPES in the Joint Operations Planning process.

The JDTC has been identified as the responsible agent for establishing a baseline training curriculum. This organization's material consisted of hard copy training manuals, Chairman of the Joint Chiefs of Staff JOPES volumes 1-3, and training slides used by JOPES instructors. Material was also gathered from Army Regulations, multiple military service school professional manuscripts, and professional military articles. These regulations, manuscripts, and articles provided a comprehensive accumulation of information reference directed policy, trained versus educated personnel, and utilization of JOPES in previous operations. Through analysis of these documents, possible recommendations were made and have been included in this researches' final finding.

Research Steps

At the beginning of this research project, the researcher took numerous days to first identify the primary issue that presented itself during the current deployment operations into Operations Iraqi and Enduring Freedom. Since the researcher had firsthand experience as a JOPES operator and planner executing deployment plans into the CENTCOM area of responsibility, he was able to first conduct a little self-reflection. After a few months of self-reflection it was determined that there is a capability gap that centers on where a deploying unit has direct access to and ability to manage their JOPES deployment plan. This capability gap provided the formulation of the primary research question. Verification of the capability gap and validation of the primary research question came through research and analysis of the doctrinal use of JOPES in deployment. The verification and validation of the secondary research questions were completed through an abbreviated DOTMLPF process. The abbreviated DOTMLPF

process research data was found, categorized by secondary research question, and analyzed.

Research Criteria

The information collected for this research project was reviewed and scrutinized for validity by using research criteria that ensured the data was objective in nature. Any data used for content analysis had to meet an objective standard of being from a military doctrinal source. This ensured that any information used in analysis was based on military doctrine and not contaminated by the researcher's subjective thoughts. The only data that this did not directly apply was the information collected from professional articles and professional military manuscripts. The only criterion that could ensure no corruption of the analysis process required that the manuscripts and articles be published by a professional military organization.

Through the above steps overlaid with these criteria, the data assembled for this research project met all of the requirements. The information analyzed for the first, second, and fourth secondary research questions was primarily constituted from Joint or Army doctrine. The third secondary research question required analysis of case studies and post deployment observations that dealt specifically with the use of JOPES in conducting execution of deploying operations. Since the question required subjective analysis the research was drawn from professional military manuscripts and one article that were all published by professional military organizations.

Conclusion

This chapter provides the reader with the steps used to complete the research project. These steps required the researcher to conduct self-reflection to develop the primary research question. Then, through DOTMLPF analysis, the secondary research questions were developed and categorized into JOPES use, JOPES training, and avenues available for developing a pool of JOPES operators. The primary method used to complete the required research was content analysis that allowed for large amounts of information to be compiled. When reviewing the literature it was found that criteria were needed to ensure that only accurate information was analyzed. Establishment of this research criteria ensured that only data used for analysis met a doctrinal standard or had been professionally vetted through a military organization. This research methodology set up the rough outline for chapter 4. Finally, this method ensured that only officially approved information was used for analysis in the following chapter.

CHAPTER 4

ANALYSIS

Introduction

The purpose of this research project is to identify the gap that hinders the execution of movements in JOPES and clarify the effects of this gap on deploying Army units. Through analysis recommendations will be made to overcome the absence of JOPES operators capable of planning, executing, and managing deployments for a modular Army deploying force. Through the research method used the researcher was able to collect a significant amount of professional and doctrinal data to use in analyzing the primary and secondary research questions. By analyzing the material, the researcher found there is a requirement for a pool of trained JOPES operators. This chapter will discuss this finding by answering the secondary research questions. These answers ultimately led to an answer for the primary research question. The chapter will be divided into subheadings by primary and then secondary research questions. This analysis will be a lead into chapter 5 for the recommendations based on the need to develop, fill, and employ a pool of trained JOPES operators in the Army.

Primary Research Question

To answer the primary research question; "To limit future movement issues during deployments, should a JOPES MOS or ASI be developed that is employed below the ITO level in a unit?," the analysis from the four secondary research questions was crucial. Analyzing how JOPES and JOPES personnel currently execute movement plans in JOPES identified that there is a gap between the units moving and the personnel

executing the plan in JOPES. When changes are needed, there are no unit personnel from the deploying unit or in the Army's new modular headquarters that has JOPES training to correct issues.

Additionally, for a Soldier to be qualified as a trained JOPES operator he or she must be using the system constantly. There is a difference between education and training, the Army has gone to great lengths with the support of USJFCOM J7-JDTC to develop education for leaders. This education has allowed personnel to understand the system in terms of what the system is capable of providing a command, but it does not provide operators who have the understanding of how to execute actions in JOPES in a task, condition, and standards format. Trained operators are what the modular force needs so they have the capability while deployed to use JOPES for management of force movements.

A position is needed to conduct JOPES and development of a position below the ITO level is needed based on the subsequent analysis of the secondary questions. Furthermore, there is no position in any Army unit below the ASCC headquarters that has a JOPES section capable of executing and managing movements in JOPES for deployments. Analysis of these points leads the researcher to conclude a need for the Army to develop an MOS or ASI. Initial analysis reference the development of an MOS identified that it is an intense process that requires further research and recommendations will be made along these lines in chapter 5. Development and incorporation of an ASI with some added staff positions would provide an immediate solution for the modular units currently deploying.

Data from military publications, professional military manuscripts, and professional articles were used to answer the secondary research questions. Specifically for the question of where JOPES operators are currently employed FMSWeb provided the official Army answer. Reference how JOPES operators are trained information from the USJFCOM J7-JTDC was analyzed along with Sperling's professional military manuscript that defined the difference between educated and trained. Information needed for analysis to answer whether a new MOS is needed to fill the gap was all collected from professional military manuscripts. Analysis reference the development of a new MOS was provided by Army Regulation 611-1. The final secondary research question required analysis of information from Army Regulation 611-1 and Department of the Army's MOS Smartbook. The following paragraphs provide an inclusive assessment of the analyzed data by secondary research question.

Secondary Research Questions

Where does the Army currently employ JOPES and JOPES personnel?

Through comprehensive analysis of data compiled from FMSWeb it was identified that the Army is very limited in their employment of JOPES operators. The researcher found using JOPES in a keyword search that only four out of twenty-seven Army commands are authorized JOPES positions within 39 separate staff sections. Analysis also found that the new modular force structure directs Theater Army to remain AOR focused and utilize Corps or Division modular headquarters to command smaller scale operations. Further analysis of staff personnel authorizations found that the Theater Army staff has an adequate number of JOPES operators to conduct planning and execution of movements. This same analysis found that even though the Corps or

Division modular headquarters is supposed to provide a basic staff structure capable of forming a Joint Task Force or Joint Force Land Component Command these staffs are not authorized an equivalent number of JOPES operators as the Theater Army.

The Army has authorized JOPES operator positions in Army Central Command, Army Southern Command, US Army Pacific, and US Army Europe (Headquarters, Department of the Army 2006) (See Appendix A). In total, these sections employ twenty-five personnel that either execute JOPES operator tasks or manage JOPES operators. All of the identified positions require personnel receive the initial JOPES training. After repeated searches and analysis of FMSWeb repository data spanning from Army Company level through Headquarters Department of the Army no other JOPES positions are authorized. Based on this analysis it is clear that a gap does exist within the deploying elements of the Army in terms of having JOPES capability.

A direct correlation can be drawn between how JOPES is used and where the JOPES operators are employed. Deploying units not having JOPES operators prevents the unit from making required changes to the movement plan to meet changing mission requirements. Analysis of Desnoyer's professional article "Brigade Mobility Officer After Action Review Report for the 5th Stryker Brigade Combat Team (SBCT) Deployment in Support of OEF," found that when the unit was "redirected by the SECDEF" (Desnoyers 2010, 1) to change deployment locations I Corps was overloaded "with only one individual operating JOPES" (Desnoyers 2010, 1) to correct deployment data. Failure to correct the deployment data in JOPES in a timely manner can result in suspension of "STRATAIR operation until the JOPES records were corrected" (Desnoyers 2010, 13).

Analysis of the development of the modular force was conducted to see if the new modular force took into account the requirement for JOPES operators on Theater Army, Corps, or Division staffs. In FM 3-93 the Theater Army "no longer has responsibility for providing direct reachback support (long-range planning, intelligence analysis, sustainment coordination) for the forward operational command post (now a Corps or other warfighting headquarters)" (Headquarters, Department of the Army 2010a,vi). Instead "theater army's enabling commands and functional brigades will continue to support operations across the GCC's AOR" (Headquarters, Department of the Army 2010a, vi). Based on this analysis additional analytical review of the development of the modular Army was conducted that found the modular design was based on "the concept of Mission Command, a process of assigning tasks and missions to subordinates and resourcing them to execute" (Svedarsky 2010, 8). The issue with this is that the new modular design limits the capabilities these new staff designs have to execute "such functions as employing indirect fires . . . and directly managing sustainment functions" (Svedarsky 2010, 8). Analysis also found that additional guidance was given during the development of the modular force which required the Army "to design an organization that could perform as an operational headquarters capable of rapid transition to a JTF or JFLCC" (Svedarsky 2010, 11). Based on the analysis of FM 3-93 and the emailed historical review it is evident that the new modular force structure expects the Corps or Division headquarters to be capable of functioning as a Joint Task Force or Joint Force Land Component Command. This required analysis of the MTOEs and modular force design of these headquarters compared to the Theater Army to see if they employ an

appropriate number of JOPES operators to conduct operations that require planning, execution, and management of movements in JOPES.

This additional analysis found that Theater Army employs JOPES operators in two primary staff sections; the maneuver and movement plans JOPES element and the G4 mobility distribution and movement operations element. The plans JOPES element employs JOPES operators responsible for conducting "development and execution of time-phased force and deployment data (TPFDD) throughout the planning continuum to include contingency planning, exercises and real-world deployments" (Headquarters, Department of the Army 2010a, 10-7). The G4 mobility distribution and movement operations JOPES operators are responsible for "matters pertaining to the theater transportation policy, transportation system, movement planning and execution, JOPES Operations and TPFDD validation in-transit visibility, and automation systems to support the deployment and redeployment of forces" (Headquarters Department of the Army 2010a, 13-13).

Analysis of the Corps and Division staff sections identified a limited number of JOPES operators in planners sections under the maneuver and movements, but no JOPES operators were identified that are tasked to execute and manage JOPES movements. If these two headquarters are expected to provide the basis of a Joint Task Force or Joint Force Land Component Command headquarters how can they meet this mission requirement without the JOPES operators? Through all of this analysis it is evident that the Army expects the Corps or Division modular headquarters to be capable of operating as a joint headquarters which is why JOPES operators are on the planning staffs. It has also been identified that the modular staffs are not manned to handle everything that

would be expected for a joint headquarters such as execute and manage movements in JOPES. Based on this analysis recommendations will be made in chapter 5 as to how the Army should fill this identified gap. This is a significant finding that leads to further analysis of what qualifies an individual as a trained JOPES operator to be used to fill the problem of making changes to JOPES in the execution process.

What classifies a Soldier as a qualified or trained JOPES operator?

Analysis found that for personnel to be qualified JOPES operators they must have a secret security clearance and complete the JDTC JOPES Support Personnel Course. This course is a five-day course that instructs personnel on the use of JOPES information technology applications. Analysis further identified that the course provides an overview of crisis action planning, development of TPFDDs, and managing the execution of deployment plans. The research also identified that JOPES skills are perishable if not constantly used.

An interesting point concerning the question of training versus education was found after analyzing Sperling's research project "The Future Role of the Joint Deployment Training Center in the Education and Training of the Joint Deployment Process." Sperling highlighted the difference between training and education in the military by finding that training requires hands on and repetitious actions. His research of professional education studies emphasized that "education focuses on teaching the what, who, where, and why" (Sperling 2003, 13). Expanding on this concept Sperling states "education often focuses on conceptual and historical knowledge" where "training . . . focuses more on building the specific areas of knowledge, skills, or attitudes that directly

influence a person's ability to perform a job" (Sperling 2003, 12). Sperling's definition of training versus education was drawn from analyzing information written by Dr. John W. Moore and Virginija Limanauskiene. These two professors teach in the field of learning and are currently expanding on the field through on going research into how people learn. Using Sperling's definitions in analyzing JOPES training provided by USJFCOM J7-JDTC of the three courses this research found only one prepares personnel to be actual operators.

The JOPES Support Personnel Course is designed "for personnel who use JOPES information technology applications in support of the joint planning and execution process" (USJFCOM J7-JDTC 2009). This course is required for any JOPES operator to gain access to the system. By Sperling's definition this course is a cross between training and education; there are just enough repitious tasks to meet the definition of training. The JOPES Action Officer Course "is intended for all action officers, senior enlisted personnel, and civilians who already possess basic JOPES systems automation skills and need advanced analytical and research tools to advise and assist Operational Planning Groups (OPGs) and other senior decision-makers" (USJFCOM J7-JDTC 2009). The JOPES Executive Presentation is "an overview of the characteristics and capabilities of JOPES . . . can include a demonstration of JOPES-related applications when required" (USJFCOM J7-JDTC 2009). By Sperling's definition these final two courses are education, because they teach the "what, who, where, and why" of executing the movement process in JOPES. Both courses provide a base line for the doctrinal deployment process and the doctrinal measures required to manage movement plans in JOPES.

As Clemons stated in his manuscript "Customer Discipline Paramount for Ensuring Efficient Airlift Operations," JOPES has "perishable factors are gained and maintained only through training" (Clemons 1998, 30). To execute movement plans in JOPES the operator must be conversant in the JOPES automation tools. The operator must also maintain an explicit understanding of the deployment process, JOPES volumes 1-3, JOPES TPFDD Letter of Instruction, TPFDD process, and specific theater business rules. In a five day course no JOPES operator could be classified as trained per Sperling's definition. Through analysis the JOPES Support Personnel Course has been identified as the course needed to qualify personnel as trained JOPES operators.

The answer to this secondary research question is that a qualified JOPES operator is a Soldier (Enlisted, NCO, Warrant Officer, or Officer) who holds a secret clearance and has successfully completed the JOPES Support Personnel Course (USJFCOM J7-JDTC 2009). Further analysis has also identified that a qualified JOPES operator is a Soldier who meets the above requirement, understands the movement's process, understands the JOPES movement guidelines, and utilizes JOPES on a consistent basis to execute movements for the unit in operational deployments as well as training exercises. JOPES operators are not an additional duty and the requirements are strict to ensure unit deployment plans are executed properly. Erroneous manipulation of movement data in JOPES by an uneducated operator will cause severe problems to an active deployment plan. The next question searches for a way to fill the gap.

Is a new MOS needed to fill the gap?

Analysis of professional military manuscripts provided multiple reports from past deployments where unit movements were hindered due to not having trained JOPES

operators. This analysis identified a need to have trained JOPES operators employed at in the deploying modular headquarters. A possible solution is to develop an MOS and employ it in the deploying modular Army headquarters. Preliminary analysis found that the development of an MOS is cumbersome and beyond the scope of this research project.

In Bossert's manuscript "Strategic Airlift Inefficiencies from Desert Shield to Vigilant Warrior" the five operations analyzed identified a common problem that the researcher experienced as a JOPES operator. The same problem that has constantly plagued deployment operations is the lack of JOPES trained personnel. Units do not directly input their movement plan into JOPES; instead the plan is loaded into TC-AIMS II at the unit level by unit movement coordinators as a secondary duty. This data is then turned into their higher headquarters for review and then ultimately to the ITO to be loaded into JOPES. The JOPES data is then reviewed by the supporting Combatant Command for submission to the ASCC and finally for validation by the supported Combatant Command. After the supported Combatant Command validates the movement plan, it is submitted to USTRANSCOM for execution. All of the submissions from the ITO and above are processed in JOPES and managed by JOPES operators.

A problem with this process is that the unit's higher headquarters in the new modular Army will not always be deploying with the unit. This causes problems in properly planning where the unit goes and just capitulates itself as the plan is submitted to subsequent higher headquarters. A unit not having JOPES operators prevents them from being able to manage or react to mission changes once the movement plan has begun execution.

This issue is amplified when changes are needed in theater and the unit does not have a JOPES trained operator to request and execute the change to the plan. As Boyd mentioned in her thesis "Lessons Learned Concerning MC&G Area, Product, and Distribution Requirements in Operation Desert Shield/Desert Storm" reference moving maps in theater "Airlift allocations should have been identified and properly loaded into JOPES" (Boyd 1992, 14). Without JOPES operators at the unit level or, at a minimum, the division level changes cannot be made in JOPES.

The multitude of changes needed for a deploying unit should be minimal; however, they happen as identified by Haulman in his research report "Intertheater Airlift Challenges of Operation Enduring Freedom." Haulman identified that during operations "personnel failed to input data as quickly or as accurately as needed to match airflow" (Haulman 2002, 5). These input and timeliness problems are amplified if they happen to a unit that is in the middle of the execution of the movement plan and cannot be corrected in time to meet the lift requirements. JOPES operators employed within a deploying unit could make the changes needed to ensure that the limited airlift available in theater is economically utilized.

Analysis of professional military manuscripts identified that there has been a consistent problem with having qualified JOPES operators below the ITO level to support unit deployments. These JOPES operators have the expertise of developing movement plans and are needed to execute changes to movement plans. The position of JOPES operators cannot be filled as an additional duty because it requires active utilization of JOPES operators to stay proficient. All of the above points lend credence to the argument that a position is needed to fill the gap. This position needs to be filled by someone who

is able to deploy with the unit and understands the unit's mission along with their movement requirements.

Do these requirements provide a significant enough reason to warrant the development of a new MOS? What options are available for the Army to overcome the gap? Since analysis has identified a gap in personnel capabilities, the Army has the options of developing a new MOS that is specifically for JOPES operators. The Army also has the option of developing an ASI that can be applied to an already existing MOS. After analyzing the two options, it would seem that an MOS would be too intensive for the Army to make the change and a recommendation is made in chapter 5 to conduct further research of this option. The final section of this chapter will identify the requirements of developing an ASI to fill the gap.

Can an ASI added to a current MOS fill the requirement for a deployed unit?

Analysis found that development of an ASI would provide deploying modular headquarters the capability of planning, executing, and managing deployment forces. There currently is no JOPES ASI, but there is a Joint Planner ASI (3H) that is based on joint planning and utilizes JOPES for planning. Further analysis using ASI 3H as a keyword search in FMSWeb found eight out of twenty-seven Army commands authorized Joint Planners in 228 various staff positions. Analysis of ASI 3H identified that it focuses on planning more than execution of movement plans in JOPES and is currently only authorized for Army officers. Based on this analysis, research was conducted into how to develop a separate ASI and which MOSs would best fill a pool of JOPES operators. Three transportation or logistics MOSs were identified for the new

ASI. Based on the basic skills of these MOSs, it is recommended they be authorized the new ASI to build a pool of JOPES operators capable of executing deployment movements in JOPES.

To determine whether an ASI would be capable of filling the requirement for deploying units, analysis was conducted of current ASIs. ASI 3H Joint Planner was identified as being the closest possible solution based on its description from DA Pam 611-21 Table 4-3. ASI 3H "identifies positions requiring personnel qualified in the Joint Operation Planning and Execution System (JOPES) . . . and supporting information technologies" (Headquarters, Department of the Army 2010b, Table 4-3). In-depth analysis using DA Pam 611-21 identified that ASI 3H is only authorized for officers. Since the intent of this research project is to develop a pool of JOPES operators who can execute movements the more personnel authorized to receive the ASI the easier it is for the Army to develop a pool of operators. ASI 3H would have to be amended to authorize officers, warrant officers, and enlisted personnel to attain it so that a larger pool of operators could be developed. Further analysis found that three of the four methods authorized to receive ASI 3H are limited to officers only and are focused on planning not movement execution. The only possible method for all Army grades to attain ASI 3H requires personnel to attend Joint Planning Orientation Course and the Joint Deployment System Course conducted by the Joint Training Office (USTRANSCOM) (Headquarters, Department of the Army 2010b, Table 4-3). Analysis also found that this ASI is only utilized in planning staff sections at various command levels from detachment to ASCC (see Appendix B). ASI 3H is not the solution needed to develop a pool of JOPES operators capable of executing movements in JOPES based on the limitation of Army

grades and that it is only utilized in planning staff sections. There is merit in the training curriculum for ASI 3H that could be utilized in development of a new ASI that will be discussed further in the recommendations in chapter 5.

Since ASI 3H did not meet the specific requirement that allowed the Army to have a pool of JOPES operators capable of planning, executing, and managing movements in JOPES analysis was conducted on how to develop a new ASI. Through research, it was found that the development of an ASI is a fairly simple process as long as a need can be demonstrated. An ASI requires an already existing MOS that is "closely associated with, but in addition to, those in the basic MOS" (Headquarters, Department of the Army 2007, 19) can fill the identified gap. The Soldiers with the related MOS can be authorized to get the ASI and have that added to their records giving the Army a pool of personnel capable of completing the assigned ASI tasks.

According to AR 611-1, development of a new ASI must meet four specific requirements. First an individual must attend "2 or more weeks of formal schooling or equivalent training" (Headquarters, Department of the Army 2007, 16). The regulation does not state any specific requirements as to which organization should own or manage the school. Analysis has identifed that modification to the current courses provided by the JDTC would be required to meet the two week training requirement. This additional time would be added to the JOPES Support Personnel Course making it by Sperling's definition training. Some adaptations would be needed and a specific arrangement of the current course would be needed to provide the training and an Army organization would have to be identified to manage this process.

The second requirement is that through the addition of the skill identifier a "tangible or intangible advantage" to the base MOS "must be clearly evident" (Headquarters, Department of the Army 2007, 16). The additional skill that would be officially added to a Soldier's record would have to clearly identify the Soldier's additional ability to execute tasks above and beyond their primary MOS tasks. As stated for the development of an MOS in the previous research question, there are many systems and requirements that a JOPES operator would be required to execute that are above and beyond any current MOS task. Again this would have to be managed by an Army organization. Below further information will be analyzed to determine which possible MOS would be authorized to receive the JOPES operator ASI.

The third requirement states that the "ASI must be applicable for TOE/MTOE/TDA position and personnel classification" (Headquarters, Department of the Army 2007, 16). Through this research project a gap has been identified that requires JOPES operators below the ITO and Combantant Command level to develop, manage, and execute movement plans in JOPES. The absence of these operators has constantly hindered deployment operations for years. After analyzing this gap, there is enough evidence that a position or section could be developed on the Army's deploying modular staff structure that would filled by the newly developed ASI. Based on this analysis these positions would be authorized in current organizations to meet the third requirement of developing a new ASI.

The fourth and final requirement for developing an ASI is "the skill or knowledge represented by the code must be one that is not demanded of all personnel in the MOS with which it is to be associated" (Headquarters, Department of the Army 2007, 16).

Analysis identified that JOPES operators have specific requirements and that a pool of qualified JOPES operators is needed. The reciprocal is also true meaning that not every Soldier involved in the deployment or movements process is required to be a JOPES operator. With the development of these authorized MTOE positions there would be a specific number of personnel needed to fill the positions with the identified MOSs and would prevent the need for everyone in the MOS to have the ASI. These MTOE positions would be assigned to personnel who have the ASI and not solely the MOS. To receive the ASI there would be a specific basis of knowledge and grade required within an MOS to ensure the personnel that receive the ASI are qualified to support a unit's need to develop, manage, and execute JOPES movement plans. This additional knowledge and grade requirement would further ensure that not every Soldier in an MOS would be required to receive the ASI.

Through analysis of the Army's MOS Smartbook three current MOSs meet the previously mentioned requirements. These same MOSs are currently employed in JOPES sections above Division according to FMSWeb. These MOSs are the Transportation Management Coordinator (MOS 88N), the Mobility Warrant Officer (MOS 882A), and the Logistics Officer (MOS 90A). The generic duties of an 88N per the Army's online MOS Smartbook are "The transportation management coordinator coordinates, monitors, controls and supervises the movement of personnel, equipment and cargo by air, rail, highway and water. Determine the most efficient mode of transport that accomplishes mission requirements." (Headquarters, Department of the Army 2010b). Duties for an 882A per the MOS Smartbook are "provides technical expertise to manage, operate and maintain the Army's movement control" (Headquarters, Department of the Army 2010b).

A 90A has the duty requirement per the MOS Smartbook to “Serve in a logistics officer position at DA staff, joint staff, MACOM staff, Corps, Division, Group, Brigade, or Battalion. Responsible for planning, developing and directing logistics operations to ensure integrating the functions of supply, transportation, maintenance, medical service administration and field services” (Headquarters, Department of the Army 2010b). Analysis of these duties verifies that personnel with these MOSs have a comprehensive enough knowledge base needed to execute JOPES movement plans.

These three MOSs would provide the basis of skills needed to meet the requirements of AR 611-1 to develop an ASI. The only requirement not directly met is the MTOE positions needed to fill as utilization assignments. As occurs in any DOTMLPF process, a change to one area drives changes to other areas. In the case of developing an ASI to overcome the gap in executing JOPES movement plans personnel, training, and organization would require changes to get the full effect of overcoming the identified gap. An unmentioned issue to this point of the analysis is what tactical knowledge would these JOPES operators have reference the specific units they are assigned. Though this is a possible problem, it is mitigated by the development of an ASI and MTOE position on these staffs. Through day-to-day training and execution of the newly developed ASI tasks these JOPES operators would be able to gain the knowledge needed to understand their commander’s tactical movement plans. Through this knowledge the gap in planning, managing, and executing movement plans in JOPES would be overcome.

Analysis did identify one outlying issue the development of a new ASI requires, which is that the skill must not be “acquired through on-the-job training (OJT) or on-the-

experience (OJE)" (Headquarters, Department of the Army 2007, 20). This final point from AR 611-1 does pose a possible need to request an exception to the policy since some of the previously mentioned ASI developmental steps require training in their assigned position. The assigned position training required would be specific to the combatant command area they are operating in and would be difficult for USJFCOM JDTC-J7 to replicate. Analysis of this outlying issue identifies that the understanding of the combatant command area specific JOPES and deployment procedures could be incorporated in the ASI training program. Since the current JOPES Support Personnel Course would have to be expanded to meet the ASI training requirement, part of the expansion could be on the area specific policies. Based on this analysis the outlying issue no longer applies and the development of an ASI provides the most logical means to overcome this research projects identified capability gap.

Conclusion

The research has concluded that there is a need for a pool of trained JOPES operators to be employed at a unit level below the ITO. This will provide a flexible capability for the deployed commander to use JOPES for planning operational movements as well as managing the execution of the movements. The ITO provides a convenient level at which to load the deploying unit's data and alleviates the unit's predeployment time needed by handling these tasks for the deploying units. The issue identified and analyzed in this chapter is that by using the ITO it handicaps the deploying unit. In the Army's modular force, Corps and Division headquarters need JOPES trained personnel that have the capability to plan and manage deploying unit's movements during execution. Analysis of current ASIs found that ASI 3H closely resembles the

requirements outlined in this study, but would have to be altered to allow all ranks to receive the ASI and further training would be needed to prepare these personnel for executing movements in JOPES. The development of a new ASI provided a more logical solution for the Army. Further analysis identified that by attaching the ASI to 88N, 882A, and 90A provides the deploying units with the appropriate pool of JOPES trained personnel with movement's knowledge. Analysis identified that with modifications to the JOPES Support Personnel Course currently taught by USJFCOM J7-JDTC requirements would be met to award an ASI to the above MOSs. This conclusion and further recommendations will be discussed in chapter 5.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This research project was initiated to find an answer to the primary research question, "to limit future movement issues during deployments, should a JOPES MOS or ASI be developed that is employed below the ITO level in a unit?" To answer this question secondary research questions were used to focus the research and find a logical answer to the primary research question. The scope of the secondary research questions centered on where JOPES operators are currently employed, what constitutes a trained JOPES operator, is the development of an MOS needed to overcome the identified gap, and can an ASI be used instead of an MOS to meet the need.

This chapter will review the analysis outlined in chapter 4 and then provide recommendations. The analysis confirmed that the lowest level that JOPES operators are employed is at the ASCC. Research also found that there are personnel in the Army that receive education on what JOPES is and a limited number receive training on how to operate JOPES. To develop a pool of trained JOPES operators an MOS or an ASI would be needed so that the Army has the ability to fill and maintain the pool of operators once they are trained not just educated. Analysis of the development of a new MOS found that the process does not meet the immediate need to provide current deploying forces with a pool of JOPES operators. Finally, analysis did find that development of an ASI attached to three current transportation MOSs or a Logistics Officer MOS would provide a direct need to deploying forces. The following paragraphs will discuss the findings in further

detail and then provide recommendations for how the Army can incorporate the findings of this research project.

Interpretation of the Findings

The findings were straight forward in terms of identifying where JOPES operators are currently employed. Doctrinally there is no section that employs JOPES operators below the ASCC. Within the Division G5 plans section there is a planning cell that by doctrine is supposed to be authorized a JOPES cell, but analysis of MTOEs on FMSWeb showed that there is no such cell authorized on Division or Corps MTOEs. There are personnel authorizations on Corps and Division staffs for JOPES planners, but these personnel are focused on planning not executing movements in JOPES. This limits the availability of JOPES planning and management capability to the Army's modular force structure.

Analysis also identified that there is a professionally recognized difference between education and training. Education provides an understanding of what a task with some understanding of what capabilities are provided by personnel executing the task. Training provides a users understanding of how a task is completed with the specific skills of completing the task with a regimented task, condition, and standard. Trained JOPES operators are what the Army needs to be able to develop, plan, execute, and manage deployment movements in JOPES. Staff officers and commanders are receiving education through professional military education which gives them the understanding of what JOPES provides in terms of capabilities. A limited number of Army personnel are receiving the training needed to understand of how to use JOPES to execute deployment operations. These personnel are only trained if they are going to an assignment above the

division. This limits their ability to provide JOPES expertise to deploying level units and does not provide deployed units the capability to execute changes to a deployment plan during execution.

Preliminary analysis of chapter 4 information identified that the development of an MOS is a drawn out process that requires the full development of a career field. Once the career field is developed a training program must be developed and then positions need to be developed. To develop these positions, due to the constrained force structure other MOSs must be decremented to provide personnel positions in the new MOS. The development and the filling of a new MOS is very unreasonable, considering the immediate need to provide a pool of trained JOPES operators.

The final question analyzed in chapter 4 identified the possibility of developing a pool of trained JOPES operators by developing an ASI. Analysis of an already existing ASI 3H Joint Planner identified some curriculum that a JOPES operator would need, but the current ASI focuses on planning not execution of movements in JOPES. Analysis also found that ASI 3H is only authorized for officers, so for this ASI to meet the needs it would have to be altered to incorporate all ranks and expand its curriculum to cover the execution of movements in JOPES. Whether changing ASI 3H to meet the needs or developing a new ASI, both options are less intensive then developing a new MOS and still provides the same capability. Altering ASI 3H or creating a new ASI requires the development of a training program that meets the regulatory requirements for an ASI. An additional positive to developing an ASI is that by regulation it must be added to an MOS that has initial knowledge of the required tasks. The analysis found that 88N, 882A, and 90A currently execute and manage unit deployment tasks. A limited number of personnel

with these MOSs already use JOPES to complete their missions. With these findings it seems only compelling that an ASI be developed to fill a pool of trained JOPES operators that can be drawn from to fill positions below the ASCC level. By creating a new ASI the Army can continue to utilize ASI 3H for the development of planners for all staffs.

There was only one unexpected finding in the research project. When the research project started, there was an initial belief on behalf of the researcher that a new MOS was needed. Through analysis, it was found that an MOS would not immediately fill the need of a modular force structure. The initial belief of the researcher stemmed from personal experience and research of the Marine Corps JOPES operators. The Army's modular force deploys as a force package, but is composed of multiple units from around the world. What the Army needs is the ability to plan, execute, and manage a deploying modular force by having trained JOPES operators in deploying modular headquarters.

Recommendations

No research project is all encompassing and it certainly does not provide answers to all questions. Further research should be continued to overcome the time constraint, assumptions, and access to the secret information that initially limited the researcher. The following recommendations are broken down into subheadings identifying areas requiring further study and recommendations that should be acted upon.

For Further Study

Based on the limitations to this research project further study is needed into the specific training requirement needed to develop an ASI. This additional research could be conducted in coordination with USJFCOM J7-JDTC and the Department of the Army to

ensure that all requirements are met. Additional research would need to be conducted to identify solutions for providing positions on Corps and Division headquarter staff sections in which the new ASI could be employed. Initial recommendation for employment of the ASI is identified below, but a long-term solution would require additional positions being added to the staff and justification would come with further research. While researching the long-term solution for the ASI development and employment, the research would need to be conducted to project the need for JOPES past current deployments to Iraq and Afghanistan. Recommend that research be conducted into expanding the role of JOPES in Division and below staff sections. There has been some research conducted in this area and, with further study, there is a belief among some military personnel that JOPES could be used at a lower level for routine mission planning. This area of research would possibly be very valuable as the Department of Defense ventures into developing a comprehensive joint structure. Expansion of study on this topic could provide the common ground and language needed to move the military into an operationally qualified joint force. Should this follow on study warrant the development of an MOS, research should start with AR 611-1. A JOPES MOS can only be created due to an identified "technological development, changes in . . . force structure, functions, missions" (Headquarters, Department of the Army 2007, 3) and specifically the new MOS would be needed "to correct performance deficiencies" (Headquarters, Department of the Army 2007, 3).

For Action

The research has identified the need for a pool of trained JOPES operators that are employed on staffs of deploying headquarter units above Brigade. The first

recommendation is to develop an ASI that is attached to 88N, 882A, and 90A MOSs that complete the required training. Currently the division transportation staff section employs a Mobility Warrant Officer (MOS 882A) and it is not recommended to add a new ASI to the current position. Instead, the recommendation is to make an additional position for a junior 882A that could be developed and advanced into the senior 882A position.

The second recommendation for the development of the new ASI would be to review the Joint Planner ASI 3H as a baseline of JOPES knowledge. The curriculum used for ASI 3H provides a robust understanding of the JOPES process and specifically how it can be used in planning. This current training modified to include the JOPES Support Personnel Course and enhanced repetitive training on the execution of movements in JOPES would prepare personnel to plan, execute, and manage deploying forces.

The third recommendation is for the employment of these trained JOPES operators on deploying Corps or Division modular staffs. To meet this recommendation the Army should identify two positions in the Corps G4 Mobility and Division transportation staff sections to operate JOPES in support of deployment requirements (see Figure 2 and 3). In the modular Army it is expected that a Corps or Division headquarters will be identified to lead a deployed modular force. JOPES operators would provide the Corps or Division headquarters the capability to plan, execute, and manage the multiple deploying units from multiple home stations into the theater of operations. Recommend that initially, personnel already authorized to fill the immediate need of current deploying forces fill these positions. Along with that recommendation, it would be understood that these personnel receive the ASI training before filling the staff positions. A future recommendation is that an additional two positions be added to the

transportation section to provide 24 hour access to JOPES. These personnel would provide additional capability to the deployed headquarters focusing on movement planning and execution in JOPES along with TPFDD validation and in-transit visibility. This would allow the maneuver and movement plans section to focus on the planning of operations and forces needed, while the actual execution is executed and managed by the mobility or transportation sections.

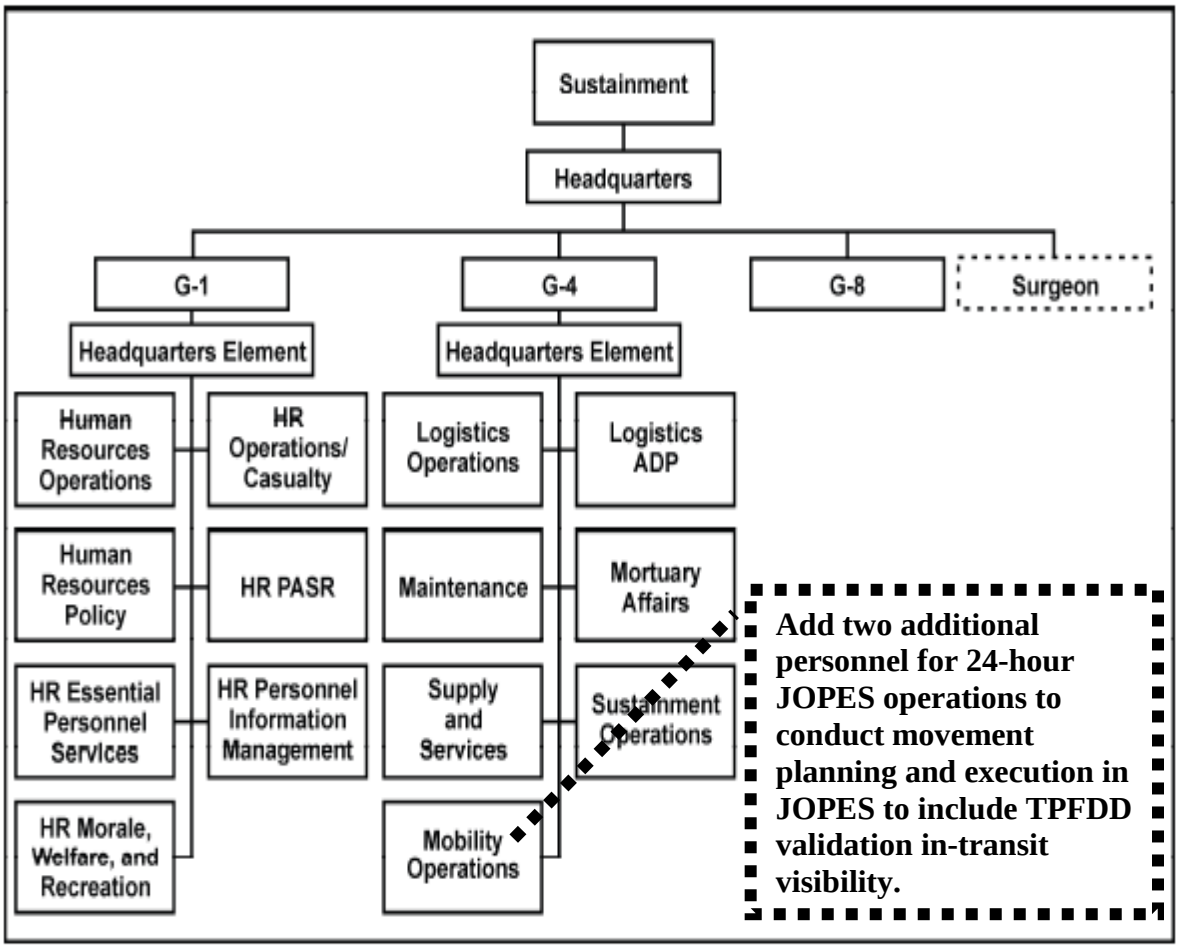

Figure 2. Main Command Post Corps Sustainment Cell
Source: Created by author with data from Headquarters, Department of the Army, Field Manual-Interim (FMI) 3-0.1, *The Modular Force* (Washington, DC: Department of the Army, 2008), 5-14.

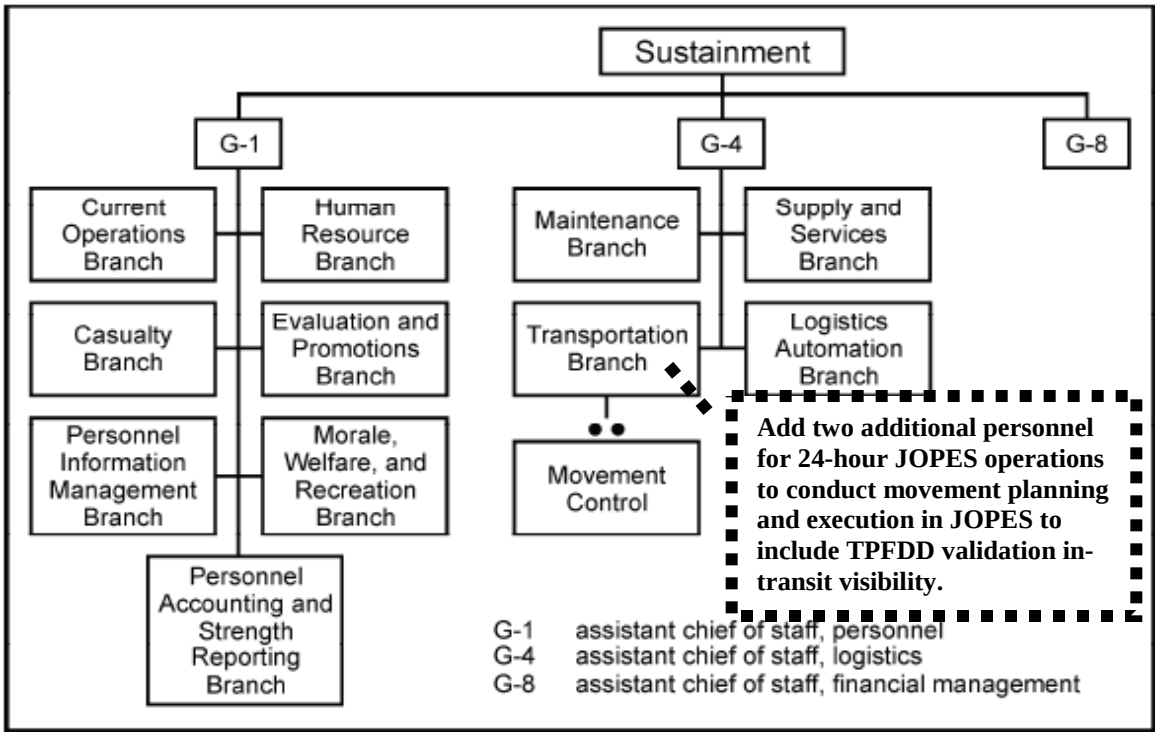

Figure 3. Main Command Post Division Sustainment Cell
Source: Created by author with data from Headquarters, Department of the Army, Field Manual-Interim (FMI) 3-0.1, *The Modular Force* (Washington, DC: Department of the Army, 2008), 5-14.

Conclusion

This chapter reviewed the findings from the analysis in the previous chapter. The end state to the analysis is that to fill the identified gap of JOPES operators an ASI should be developed. Recommendations based on these findings were broken into two subcategories identifying areas that require further research and actions that based on the findings should be taken immediately. The development of the ASI and assignment of personnel with the new ASI should be done in a timely manner to support the current deploying operations.

APPENDIX A

AUTHORIZED JOPES STAFF SECTIONS WITH MOS AND POSITION TITLES

Command	Level of Command	MTOE Paragraph Title	Grade	MOS	ASI	Position Title
Army Central	ASCC	G4 Mobility Division JOPES Branch	O5	88A		Team Chief
Army Central	ASCC	G4 Mobility Division JOPES Branch	W2	882A		Mobility Officer
Army Central	ASCC	G4 Mobility Division JOPES Branch	O4	88A		Plans Officer
Army Central	ASCC	G4 Mobility Division JOPES Branch	O4	90A		Operations Officer
Army Central	ASCC	G4 Mobility Division JOPES Branch	W3	882A		Mobility Officer
Army Central	ASCC	G4 Mobility Division JOPES Branch	E7	88N		Movements NCO
Army Central	ASCC	G4 Mobility Division JOPES Branch	E7	88N		Staff Movements NCO
Army Central	ASCC	Future Plans Division JOPES Branch	O5	21D		Chief
Army Central	ASCC	Future Plans Division JOPES Branch	O4	21D		Plans Officer
Army Central	ASCC	Future Plans Division JOPES Branch	O4	53A		Assistant Operations Officer
Army Central	ASCC	Future Plans Division JOPES Branch	O3	02A		Plans Officer
Army Central	ASCC	Future Plans Division JOPES Branch	O3	88A		Plans Officer
Army Central	ASCC	Future Plans Division JOPES Branch	E6	25B		JOPS Team Chief
Army Central	ASCC	Future Plans Division JOPES Branch	E6	88N		Transportation Management
Army Central	ASCC	Future Plans Division JOPES Branch	E5	25B		Senior JOPS Analyst
Army Central	ASCC	Future Plans Division JOPES Branch	E4	25B		JOPS Analyst
Army Central	ASCC	G4 Mobility Division JOPES Branch	E7	25B		Senior Data System Integrator
Army Central	ASCC	G4 Mobility Division JOPES Branch	E8	88Z		Transportation Supervisor
Army Central	ASCC	G4 Mobility Division JOPES Branch	O5	90A		Operations Officer
US Army South	ASCC	G4 Mobility Division JOPES Branch	E7	88N		Movements NCO
US Army South	ASCC	G4 Mobility Division JOPES Branch	E7	88N		Staff Movements NCO
US Army South	ASCC	G4 Mobility Division JOPES Branch	E7	25B		Senior Data System Integrator
US Army South	ASCC	G4 Mobility Division JOPES Branch	W2	882A		Mobility Officer
US Army South	ASCC	G4 Mobility Division JOPES Branch	W3	882A		Mobility Officer
US Army South	ASCC	Future Plans Division JOPES Branch	O4	90A		JOPES Officer
US Army Europe	ASCC	Main Command Post Manuever Plans JOPES Section	E4	25B		JOPS Analyst
US Army Europe	ASCC	Main Command Post Manuever Plans JOPES Section	E3	25B		JOPS Analyst
US Army Europe	ASCC	Main Command Post Manuever Plans JOPES Section	O4	01A	3H	Assistant Operations Officer
US Army Europe	ASCC	Main Command Post Manuever Plans JOPES Section	O5	01A	3H	Chief
US Army Europe	ASCC	Main Command Post Manuever Plans JOPES Section	E5	25B		Senior JOPS Analyst
US Army Europe	ASCC	Main Command Post Manuever Plans JOPES Section	E6	25B		JOPS Team Chief
US Army Europe	ASCC	Main Command Post Manuever Plans JOPES Section	E6	88N		Transportation Management Supervisor
US Southern European TF	ASCC	Future Plans Division JOPES Branch	O4	90A		JOPES Officer
US Southern European TF	ASCC	G4 Mobility Division JOPES Branch	E7	25B		Senior Data System Integrator
US Southern European TF	ASCC	G4 Mobility Division JOPES Branch	W4	915E		Senior Ordinance Logistics Technician

Command	Level of Command	MTOE Paragraph Title	Grade	MOS	ASI	Position Title
US Army Pacific	ASCC	Main Command Post Manuever Plans JOPES Section	E5	25B		Senior JOPS Analyst
US Army Pacific	ASCC	Main Command Post Manuever Plans JOPES Section	O4	01A	3H	Assistant Operations Officer
US Army Pacific	ASCC	Main Command Post Manuever Plans JOPES Section	E6	25B	2S	JOPS Team Chief
US Army Pacific	ASCC	Main Command Post Manuever Plans JOPES Section	E6	88N	2S	Transportation Management Supervisor

Legend	
Level of Command	ASCC -Army Service Component Command
MOS	01A - Officer Generalist
	02A - Combat Arms Generalist
	21D - Corps of Engineers
	25B - Communications and Information Systems
	53A - Systems Automation Officer
	88A - Transportation Officer
	88N - Transportation Management Coordinator
	88Z - Transportation Senior Sergeant
	90A - Logistics Officer
	882A - Mobility Warrant Officer
	915E - Automative Maintenance Warrant Officer
ASI	3H - Joint Planner
	2S - Battle Staff Operations

Source: Created by author with data from Headquarters, Department of the Army, FMSWeb, https://webtaads.belvoir.army.mil/usafmsa/ (accessed 10 June 2010); Headquarters, Department of the Army, DA Pam 611-21, *Smartbook*, https://smartbook.armyg1.pentagon.mil/default.aspx (accessed 25 May 2010).

APPENDIX B

ASI 3H JOINT PLANNER AUTHORIZED COMMANDS AND POSITION TITLES

Command	Level of Command	Grade	MOS	ASI	Position Title
Army Central	ASCC	O4	13A	3H	Plans Officer
US Army South	ASCC	O4	13A	3H	Plans Officer
Reserve	Detachment	O4	35D	3H	Tactical Intelligence Officer
Reserve	Detachment	O4	02A	3H	Operations Officer
Reserve	Detachment	O5	02A	3H	Liaison Officer
Reserve	Detachment	O4	90A	3H	Logistics Officer
Reserve	Group	O5	30A	3H	Operations Officer
Reserve	Group	O3	01A	3H	Assistant Operations Officer
Reserve	Group	O4	30A	3H	STO Planner
Reserve	Group	O4	30A	3H	Operations Officer
Reserve	Group	O4	35D	3H	Intelligence Officer
Reserve	Group	O5	30A	3H	Operations Officer
Reserve	Group	O4	30A	3H	Operations Officer
Reserve	Group	O4	30A	3H	STO Planner
Reserve	Group	O4	35D	3H	Intelligence Officer
Reserve	Group	O3	01A	3H	Assistant Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Operations Officer
Reserve	Battalion	O5	30A	3H	Commander
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Targeting
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	53A	3H	Network Officer
Reserve	Battalion	O3	35E	3H	Counter Intelligence Officer
Reserve	Battalion	O5	30A	3H	Commander
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Targeting
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	53A	3H	Network Officer
Reserve	Battalion	O3	35E	3H	Counter Intelligence Officer
Reserve	Battalion	O4	30A	3H	Operations Officer
Reserve	Battalion	O3	01A	3H	Plans Officer
Reserve	Battalion	O3	35D	3H	Intelligence Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Operations Officer

Command	Level of Command	Grade	MOS	ASI	Position Title
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Operations Officer
Reserve	Battalion	O4	53A	3H	Network Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Targeting
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O5	30A	3H	Commander
Reserve	Battalion	O3	35E	3H	Counter Intelligence Officer
Reserve	Battalion	O4	53A	3H	Network Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Targeting
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O5	30A	3H	Commander
Reserve	Battalion	O3	01A	3H	Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Operations Officer
Reserve	Battalion	O3	35E	3H	Counter Intelligence Officer
Reserve	Battalion	O4	30A	3H	Operations Officer
Reserve	Battalion	O3	01A	3H	Plans Officer
Reserve	Battalion	O3	35D	3H	Intelligence Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Operational Security Officer
Reserve	Battalion	O4	30A	3H	Operational Security Officer

Command	Level of Command	Grade	MOS	ASI	Position Title
Reserve	Battalion	O4	30A	3H	Operational Security Officer
Reserve	Battalion	O4	30A	3H	Operational Security Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	35D	3H	Intelligence Officer
Reserve	Battalion	O4	30A	3H	Operations Officer
Reserve	Battalion	O3	01A	3H	Plans Officer
Reserve	Battalion	O4	30A	3H	Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	35D	3H	Intelligence Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Operational Security Officer
Reserve	Battalion	O4	30A	3H	Operational Security Officer
Reserve	Battalion	O4	30A	3H	Operational Security Officer
Reserve	Battalion	O4	30A	3H	Operational Security Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O4	30A	3H	Information Operations Officer
Reserve	Battalion	O3	01A	3H	Plans Officer
Europe	ASCC	O5	01A	3H	Chief
Europe	ASCC	O4	01A	3H	Assistant Operations Officer
Europe	ASCC	O5	13A	3H	Fire Support Officer
Europe	ASCC	O4	13A	3H	Plans Officer
Europe	ASCC	O5	35D	3H	Chief
Europe	ASCC	O5	70H	3H	Medical Plans Officer
Europe	ASCC	O4	70H	3H	Medical Operations Officer
Europe	ASCC	O4	37A	3H	Psychological Operations Officer
Europe	ASCC	O4	35D	3H	Intelligence Officer
Europe	ASCC	O4	18A	3H	Operations Officer
Europe	ASCC	O6	13A	3H	Fire Support Officer
Europe	ASCC	O5	30A	3H	Chief
Europe	ASCC	O4	30A	3H	Information Operations Officer
Europe	ASCC	O4	35G	3H	SW Support Officer
Europe	Corps	O6	59A	3H	G5 (Future Plans Officer)
US Forces	Corps	O4	59A	3H	Plans Officer
US Forces	Corps	O4	59A	3H	Plans Officer
US Forces	Corps	O4	59A	3H	Plans Officer
US Forces	Division	O4	59A	3H	Strategic Plans Officer
US Forces	Division	O4	59A	3H	Strategic Plans Officer
US Forces	Division	O4	59A	3H	Strategic Plans Officer

Command	Level of Command	Grade	MOS	ASI	Position Title
US Forces	Division	O4	59A	3H	Strategic Plans Officer
US Forces	Division	O4	59A	3H	Strategic Plans Officer
US Forces	Division	O4	59A	3H	Strategic Plans Officer
US Forces	Division	O4	59A	3H	Strategic Plans Officer
US Forces	Division	O4	59A	5P	Strategic Plans Officer
National Guard	Group	O4	30A	3H	Operations Officer
National Guard	Group	O4	30A	3H	STO Planner
National Guard	Group	O3	01A	3H	Assistant Operations Officer
National Guard	Group	O4	35D	3H	Intelligence Officer
National Guard	Group	O5	30A	3H	Operations Officer
National Guard	Group	O4	35D	3H	Intelligence Officer
National Guard	Group	O3	01A	3H	Assistant Operations Officer
National Guard	Group	O4	30A	3H	STO Planner
National Guard	Group	O4	30A	3H	Operations Officer
National Guard	Group	O5	30A	3H	Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	01A	3H	Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	01A	3H	Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	35E	3H	Counter Intelligence Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	01A	3H	Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	01A	3H	Operations Officer
National Guard	Battalion	O5	30A	3H	Commander
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Targeting
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	53A	3H	Network Officer
National Guard	Battalion	O3	35E	3H	Counter Intelligence Officer
National Guard	Battalion	O5	30A	3H	Commander
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Targeting
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	53A	3H	Network Officer
National Guard	Battalion	O3	01A	3H	Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	35D	3H	Intelligence Officer
National Guard	Battalion	O3	01A	3H	Plans Officer
National Guard	Battalion	O4	30A	3H	Operations Officer
National Guard	Battalion	O3	01A	3H	Operations Officer

Command	Level of Command	Grade	MOS	ASI	Position Title
National Guard	Battalion	O3	35D	3H	Intelligence Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	01A	3H	Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	01A	3H	Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	01A	3H	Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	01A	3H	Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	01A	3H	Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	01A	3H	Operations Officer
National Guard	Battalion	O5	30A	3H	Commander
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Targeting
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	53A	3H	Network Officer
National Guard	Battalion	O3	35E	3H	Counter Intelligence Officer
National Guard	Battalion	O5	30A	3H	Commander
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Targeting
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	53A	3H	Network Officer
National Guard	Battalion	O3	35E	3H	Counter Intelligence Officer
National Guard	Battalion	O4	30A	3H	Operations Officer
National Guard	Battalion	O3	01A	3H	Plans Officer
National Guard	Battalion	O4	30A	3H	Operations Officer
National Guard	Battalion	O3	01A	3H	Plans Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Operational Security Officer
National Guard	Battalion	O4	30A	3H	Operational Security Officer
National Guard	Battalion	O4	30A	3H	Operational Security Officer
National Guard	Battalion	O4	30A	3H	Operational Security Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	35D	3H	Intelligence Officer

Command	Level of Command	Grade	MOS	ASI	Position Title
National Guard	Battalion	O4	30A	3H	Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O4	30A	3H	Operational Security Officer
National Guard	Battalion	O4	30A	3H	Operational Security Officer
National Guard	Battalion	O4	30A	3H	Operational Security Officer
National Guard	Battalion	O4	30A	3H	Operational Security Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Battalion	O3	35D	3H	Intelligence Officer
National Guard	Battalion	O3	01A	3H	Plans Officer
National Guard	Battalion	O4	30A	3H	Information Operations Officer
National Guard	Division	O4	59A	3H	Strategic Plans Officer
National Guard	Division	O4	59A	3H	Strategic Plans Officer
National Guard	Division	O4	59A	3H	Strategic Plans Officer
Pacific	ASCC	O4	01A	3H	Assistant Operations Officer
Pacific	ASCC	O5	13A	3H	Fire Support Officer
Pacific	ASCC	O4	13A	3H	Plans Officer
Pacific	Division	O4	59A	3H	Strategic Plans Officer
Eighth Army	Division	O4	59A	3H	Strategic Plans Officer

Source: Created by author with data from Headquarters, Department of the Army, FMSWeb, https://webtaads.belvoir.army.mil/usafmsa/ (accessed 10 June 2010); Headquarters, Department of the Army, DA Pam 611-21, *Smartbook*, https://smartbook.armyg1.pentagon.mil/default.aspx (accessed 25 May 2010).

REFERENCE LIST

Alvis, Jason M. 2009. The (SOF) truth about ARSOF logistics transformation. Monograph, School of Advanced Military Studies, US Army Command and General Staff College, Fort Leavenworth.

Bossert, Philip A. 1995. Strategic airlift inefficiencies from desert shield to vigilant warrior. Master's Thesis, US Army Command and General Staff College, Fort Leavenworth.

Boyd, Teresa J. 1992. Lessons learned concerning MC&G area, product, and distribution requirements in operation desert shield/desert storm. Master's Thesis, Naval War College, Newport.

Brockman, Jonathan B. 2002. The deployability of the IBCT in 96 hours: fact or myth? Monograph, School of Advanced Military Studies, US Army Command and General Staff College, Fort Leavenworth.

Clemons, Stanley B. 1998. Customer discipline paramount for ensuring efficient airlift operations. Master's Thesis, Air War College, Maxwell Air Force Base.

Desnoyers, Raynold J. 2003. Brigade mobility officer after action review report for the 5th Stryker Brigade Combat Team (SBCT) deployment in support of OEF. *Division Transportation Officer and Warrant Officer Newsletter* 6, no. 1 (January-March): 3.

Edwards, Paul N. 2009. *How to read a book*. http://pne.people.si.umich.edu/PDF/howtoread.pdf (accessed 25 October 2009).

Ford, Allen S. 2004. Little JOPES at the tactical level of war. Monograph, School of Advanced Military Studies, US Army Command and General Staff College, Fort Leavenworth.

Gaffney, David B. 2008. Army logistics transformation: A key component of military strategic responsiveness. Master's Thesis, Air War College, Carlisle.

Hamilton, Harry S. 1993. The VII corps deployment to Saudi Arabia: An analysis of deployment transportation planning and management. Master's Thesis, US Army Command and General Staff College, Fort Leavenworth.

Haulman, Daniel L. 2002. Intertheater airlift challenges of operation enduring freedom. Research Report, Air Force Historical Research Agency, Maxwell Air Force Base.

Headquarters, Department of the Army. 2006. FMSWeb. https://webtaads.belvoir.army.mil/usafmsa/ (accessed 10 June 2010).

———. 1997. Army Regularion (AR) 611-1, *Military occupational classification structure develoment and implementation.* Washington, DC: Department of the Army.

———. 2003. Field Manual (FM) 4-01.30 (FM 55-10), *Movement control.* Washington, DC: Department of the Army.

———. 2006. Army Regularion (AR) 570-4, *Manpower management.* Washington, DC: Department of the Army.

———. 2008. Field Manual Interim (FMI) 3-0.1, *The modular force*. Washington, DC: Department of the Army.

———. 2010a. Field Manual (FM) 3-93 (FM 100-7), *Theater Army operations.* Initial Draft. https://www.us.army.mil/suite/files/22090689 (accessed 10 June 2010).

———. 2010b. Department of the Army (DA) Pam 611-21, *Smartbook.* https://smartbook.armyg1.pentagon.mil/default.aspx (accessed 25 May 2010).

Isbell, Philip L. 1991. Military standardized transportation and movement procedures detailed manifest data storage requirements. Master's Thesis, Air Force Institute of Technology, Wright-Patterson Air Force Base.

Jasmin, Cedric R. 2002. The need for a strategic mobility strategy for the objective force. Strategy Research Project, US Army War College, Carlisle Barracks.

Layer, Brian R. 1994. Contingency operation logistics: USTRANSCOM's role when less must be more. Monograph, School of Advanced Military Studies, US Army Command and General Staff College, Fort Leavenworth.

Lind, Stephen G. 2008. A case study of the implementation of joint planning in an organization undergoing transformation to joint force headquarters in one state. Master's Thesis, US Army Command and General Staff College, Fort Leavenworth.

Newberry, Brian M. 2005. To TPFFD or not to TPFDD: is the TPFDD outdated for expeditionary US military ops? Monograph, School of Advanced Military Studies, US Army Command and General Staff College, Fort Leavenworth.

Sadacca, Robert, John P. Campbell, Ani S. Difazio, Sheila R. Schultz, and Leonard A. White. 1990. Scaling performance utility to enhance selection/classification decisions. *Personnel Psychology* (1990): 367-378.

Sager, Christopher E., Teresa L. Russell, Roy C. Campbell, and Laura A. Ford. 2005. Future soldiers: analysis of entry-level performance requirements and their predictors. Technical Report, United States Army Research Institute for the Behavioral and Social Sciences, Arlington.

Sperling, Ron L. 2003. The future role of the joint deployment training center in the education and training of the "joint deployment process" at intermediate and senior service schools. Master's Thesis, Air Force Institute of Technology, Wright-Patterson Air Force Base.

Stand-To. Stand-To! Stand-To: n. Procedures prior to first light to enhance unit security. 14 March 2006. http://www.army.mil/standto/archive/2006/03/14/ (accessed 25 October 2009).

Stein, Jess, Leonore C. Hauck, and P. Y. Su. 1982. *The Random House college dictionary.* New York: Random House, Inc.

Svedarsky, Fred, Combined Arms Doctrine Directorate. 2010. Development of modular force designs in perspective. Electronic copy received by author, 10 June.

Thie, Harry J., and Robert C. Lorbeer. 1976. Better personnel management through applied management science. *Interfaces* 6, no. 3 (May): 68-73.

USJFCOM J7-Director for Operational Plans and Joint Force Development. 2005. Joint Publication 1-02, *Department of Defense dictionary of military and associated terms.* Suffolk: USJFCOM.

———. 2006. Joint Publication 5-0, *Joint operation planning.* Suffolk: USJFCOM.

USJFCOM J7-JDTC. 2006. *JOPES action officer course (JAOC).* Fort Eustis: USJFCOM J7-JDTC.

———. 2007. *Joint operation planning and execution system (JOPES) support personnel course.* Fort Eustis: USJFCOM J7-JDTC.

———. 2009. *Joint Deployment Training Center*. https://www.jdtc.jfcom.mil/Main.aspx (accessed 23 May 2010).

Waddell, William. 2004. 10/80th BN (CGSC) - GCCS/JOPES Training. *The Collins Center Update*: 4.

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